Contents

Refutation of Advaita Vedanta in Major Jaina Works 77
Yajneshwar S. Shastri

Jaina Caves in Orissa: Its Architectural Significance 89
Ananda Chandra Sahoo

Units of Length in Jaina Cannons 94
N. L. Jain

Vaisnava Themes in Dilwara Jaina Temples 112
Maruti Nandan Prasad Tiwari
Kamal Giri

An Unpublished Medieval Image of Bhagavan Aranatha from Bhagalpur 124
Ajoy Kumar Sinha

Books Received 126

Plates
Vaisnava Themes in Dilwara Jaina Temples 117
Books Received


Text with English translation of *Jaina Siddhānta Dipikā* by late Dr. Satkari Mookherjee and notes and introduction by Dr. Nathmal Tatia.

MUNI JAMBUVIJAYA(ed), *Thānāṁgasuttam* and *Samavāyāṁgasuttam*. Jaina Agama Series No. 3, Sri Mahavira Jaina Vidyalaya, Bombay, 1985. Pages 86+793. Price Rs. 120.00.

Text with introduction and appendices.


Text with Introduction.


Contains articles contributed by different writers on cultural, political and socio-religious account of the district from the earliest times to 1200 A.D.


Text with Gujarati translation and notes.


Text with Sanskrit rendering and notes. Hindi translation by Muni Dulharaja.


Text along with introduction, English translation and notes, of the Apabhramśa section of Hemacandra’s Prakrit grammar which forms the eighth chapter of his *Siddha-Hema-Sabdānuśāsana*. 
Refutation of Advaita Vedanta in Major Jaina Works

YAJNESHWAR S. SHASTRI

History of Indian philosophy tells us that all the systems of Indian philosophy developed in the atmosphere of freedom of thought. There was a tradition in Indian philosophical platform to present opponent's view first known as the pūrvapakṣa (prior view) and then establishment of one's own view by refuting opponent's stand-point known as the uttarapakṣa or siddhānta (conclusion). This kind of method inspired the Indian thinkers to study thoroughly views of all others prior to the establishment of their own system of philosophy and gave thoroughness, perfection and catholic spirit to their system. Jaina philosophers also following the same broad-minded tradition, presented views of all the systems of Indian thought with considerable care and established their own principles refuting opponent's view with logical rigour. But it is very interesting to note that just as great thinkers of other schools of thought such as Bhartrhari,1 Kumarilabhatta,2 Prabhakara,3 Jayantabhatta4 and Udayana,5 who treated only Advaita as real Vedanta system, similarly eminent philosophical personalities of Jainism presented and refuted only Advaita system of Vedanta in their writings. Even later writers who flourished after Ramanuja and Madhva mentioned neither Visistadvaita nor Dvaita system of Vedanta.

1 yatra drasta ca drsyam ca darsanam ca vikalpanam tasyaivarthasya satyatva-


4 atra tavat vedantina ahuh... nityasukhamatmano mahatvavadastityagamapramanyadabhypagamyatam taccam samaradasayam avidyavaranavasesa nanabhuhyate


5 suddhabuddhasvabhava ityaupanisadah—Nyaya Kusumanjali, I, p. 4-5, pub. Chowkhamba Sanskrit Series, Benares, 1912.
Criticism of Upanisadic ātmādvaīta or brahmādvaīta is found in early Jaina Āgamas such as Sātrakṛtāṅga, and Vīsesāvāya-yakabhaṣya. The line of presentation and refutation of Advaita is more or less similar in all the major works of Jainism. Certain common features are found in both Jainism and Advaita Vedanta such as liberation as the highest goal of life, ignorance of Reality as the cause of our bondage, law of karma, jīvanmukti etc. Still in certain other matters both the systems are diametrically opposed to each other. Absolutism of Advaita Vedanta claims that, Reality is one without a second, this world is mere appearance and ultimately there is no difference between supreme Reality and individual soul. Jainism is a system of realism, dualism and pluralism. It is a realism because it recognises the reality of the external world, it is a kind of dualism, because it advocates two fundamental realities the jīva (soul) and the ajīva (matter) which are obviously contradictorily related to each other, and a pluralism on account of belief in plurality of substance. Advaita Vedanta believes in absolute non-dualism while Jainism advocates non-absolutism or many-sided theory of Reality (ānekāntavāda). It rejects both the extreme view of absolute eternality as well as absolute non-existence. It is a system of unity in difference, of one-in-many and of identity-in-change. According to Jainism Advaita Vedanta is one-sided theory which rejects particularities and emphasises only oneness of Reality. It gives only partial knowledge of Reality and falls under the samgraha-naya.

(b) Vīsesāvāya-yakabhaṣya (V.A.B.), II, gatha 2036-2045, pub. L. D. Institute of Indology, Ahmedabad, 1968.


(a) T.S., I, v. 2.


(b) P.N.T., VII-13, 15, 16, p. 518-520.
Great logicians of Jaina school such as Samantabhadra, Akalanka, Vidyanandi, Prabhacandra, Hemacandra, Vadi-devasuri, Mallisena and others have severely criticised the Advaitic theory of non-dual Brahman, doctrine of māyā and oneness of individual souls (ekajīvavāda). Criticism of Advaitic conceptions are scattered in different Jaina works. An humble attempt has been made here to size them into unity in a very condensed form.

Jaina thinkers argue that Advaitic doctrine of non-duality of Brahman and theory of māyā (i.e. illusory nature of the world) cannot be proved by any accredited means of knowledge. If it is provable by any means of knowledge then there is duality of pramāṇa and prameya. First of all, existence of non-dual Brahman is contradicted by our perceptual experience. Perception reveals only the world of plurality. Daily experiences of duality or plurality of phenomena cannot be repudiated as false appearance or illusory, because this difference is clearly seen and felt. There is no proof against this duality or plurality which is cognised in our normal experience. Where is contradiction in saying that potter fashions a pot with his sticks and eats his food with his own hand. The difference (such as potter and his actions) between agent and action is even known by the ordinary people. If Advaitic view of non-dual Brahman is accepted, then, the difference observed between the agent and the action will not be possible. The standpoint of the Advaitin’s that one Absolute transforms into many

---

18 _P.N.T.,_ I-15, VII, 13-17 and 56.
20 _S.S.P.,_ p. 7.
21 _A.S.P.,_ 158.
22 (a) _Tattvarthanavartika,_ p. 21, pub. Bharatiya Jnanapitha, Kasi, 1953.
    (b) _A.M.,_ 24.
    (c) _A.S.,_ p. 158.
such as agent and action, etc., also indicates duality. This is because one Absolute never transforms into many without the assistance of others, which means acceptance of duality between the assistant and assisted. The well-known example of shell and silver given by the Advaita Vedantins to prove the ultimate falsity of the phenomenal world and oneness of Brahman, itself proves the existence of the shell and the silver as two different entities. In the same way, the statement of Advaitins that Brahman is one without a second and the world is just appearance proves the duality of Brahman and the phenomenal world which is different from Brahman. It is also not tenable to argue that one unitary self-identical Brahman appears as the plurality of phenomena just as in dream a plurality of facts is experienced though it is one Consciousness that only exists and is felt and thus existence of one Absolute Brahman is not contradicted by perceptual experience. This is because even in dream as in wakeful experience, the consciousness of action is different from that of the agent because dream-contents are produced by different memory impressions.

The view-point that the indeterminate (nirvikalpa) cognition which cognises existence of Brahman cannot be accepted as source of our experience, because we never perceive what is not determined by space, time and what is not other than the knowing Self. On opening our eyes we perceive specific existence determined by space, time and otherwise and the like. Granting that indeterminate cognition is a kind of valid source of knowledge, it must be accepted that, it will not only take note of what Brahman is, but, will also take note of what Brahman is not and thus, it leads to dulism of Brahman and non-Brahman. Even the argument that perception has no power to deny the Reality, it only affirms, is baseless because affirmation always implies negation, a thing cannot be affirmed to be yellow without denying that it is black. Thus affirmation and negation which are presented together are the positive and negative aspects of a single Reality. Our perceptual experience instead of proving one Brahman, proves difference to be as integral

33 S.S.P., p. 6-7.
34 antirvacayvidhyadvitaya sacivasya prabhavato vivartaya-
yasyaite viyadenillatejo avanayah
yatascabhadvisvam caramacaramuccavacamidam
namamastobrahmasparimitasukhijnanamamratam
—Bhamati, Mangala Verse 1, quoted in S.S.P., p. 2.
35 A.S., p. 2.
36 A.S., p. 158.
37 S.S.P., p. 4.
38 S.M., p. 82.
to Reality as identity.\textsuperscript{29} If perception only affirms Reality—i.e. Brahman, then why not to state that it affirms this plurality of phenomenal world also? If it affirms both, then there is a dualism of Brahman and the world. Thus argument of the Vedantins that perception only affirms positive Reality, is not justified by our experience. If Brahman is only real and this world is false, then Brahman could have been known in the first case of our normal experience and not this pluralistic phenomenal world.\textsuperscript{30}

Even the non-duality of Brahman cannot be proved on the basis of pure logic also. When Vedantins argue that \textit{atman} is un-born, un-bound and always free and thus, in reality there is neither bondage nor liberation, etc.,\textsuperscript{31} this is purely fabrication of mind and to prove such kind of \textit{atman} by inference will be completely imaginary. The consequence of this is attainment of an imaginary liberation.\textsuperscript{32} Bondage and liberation are facts and both cannot be regarded as illusory. Denial of distinctions between them in defiance of experience is nothing but embarrassing the scepticism or universal nihilism.\textsuperscript{33}

If non-duality of Brahman is proved with the help of valid inference—which involves the proban (\textit{hetu}) and the probandum (\textit{sādhyā}), then there is clear admission of duality between the proban and probandum.\textsuperscript{34} The fact is that both cannot be identical because, inference will be invalid unless both are admitted as two distinct facts. Again it will not be possible to construct a syllogism which demands different members. In inference, one proves the probandum by means of proban, proceeding from ‘the known to the un-known’ which means inevitable dualism of ‘the known and the un-known’. It is also illogical to argue that so far as the opponents’ refutation is concerned, the conditions of inference, such as the proban, the probandum and example, are accepted as true by the opponents and hence they are valid, because it will again lead to dualism of one’s own acceptance and the acceptance of the opponent.\textsuperscript{35} If the conditions of inference (the

\textsuperscript{29} S.M., p. 79.
\textsuperscript{30} S.S.P., p. 8.
\textsuperscript{32} T.S., V, p. 25-26.
\textsuperscript{33} (a) A.S., p. 159.
(b) S.S.P., p. 7.
\textsuperscript{34} (a) A.M., 26.
(b) A.S., p. 160-161.
\textsuperscript{35} (a) A.M., 24.
(b) A.S., p. 158-9.
proban, the probandum and the example) are false and thus cognition of difference be considered as false, then that inference will be declared to be in-valid, because no valid conclusion can be drawn from false premises. If Advaitins prove their theory of non-duality on the basis of false premises, then we may obtain real fire from the dream smoke.\footnote{S.S.P., p. 7.}

In addition to all these difficulties, the word ‘duality’ which occurs in the word Advaita itself indicates acceptance of duality. ‘Advaita’ means rejection of ‘dvaita’. Without acceptance of ‘dvaita’, its denial is also not possible. Nothing is contradicted unless it exists and thus, non-duality which contradicts duality, from this very fact accepts the existence of duality.\footnote{(a) A.M., 27. (b) A.S., p. 162.} Again, it is not plausible to argue that Brahman is supporting ground of all and is that principle of existence which runs through all things and unites them in one Reality, because it clearly involves the dualism, of a principle that runs through the things \((anvētr)\) and the things through which it runs \((anvijayamāna)\).\footnote{S.M., p. 83.} If the doctrine of Advaita is based on scriptural testimony and not on pure logic, then, dualism or pluralism may also be said to be based on scriptures on the same ground.

Even acceptance of scriptural testimony implies dualism of \(āgama\) (revelation) and Brahman i.e. dualism of \(vacya-vācaka-bhāva\), without which these scriptures declare nothing.\footnote{vacyavacakabhāvalaksanasya dvāityasyaiva tatropi darsanat, S.M., p. 83.} Ontologically, scriptures cannot be identical with Brahman because the means of proof \((āgama)\) and the object of proof must be different. Otherwise they can establish nothing. In fact, scriptural statements such as “All that exists is Brahman”, “Everything is that one Reality”, etc. which Advaitin’s quote in their support, prove dualism between all existing things of the world and Brahman.\footnote{S.M., p. 83.} Even scriptures cannot be regarded as the essence of the Absolute, because, essence and possessor of essence must be numerically different.\footnote{S.S.P., p. 5.} Another important thing is that, as far as these Vedantic texts are concerned, Advaitin’s interpretations are not to be accepted as final word. This is because there are other possible interpretations which are in harmony with dualism or pluralism as interpreted in \(Viṣeṣāvasyakabhāṣya\).\footnote{V.A.B., II, gatha 2036-2045.}
If Absolute Brahman is self-proved, then there is no harm in accepting duality or plurality or voidity as self-proved truth. Self-intuition cannot be considered as proof for the existence of non-dual Brahman, because, there is again an inevitable dualism between the proof (i.e. self-intuition) and the object of proof (i.e. Brahman). If self-intuition is identified with the Absolute, then it cannot be considered as a proof for the existence of Brahman. It is self-contradictory to say that self-evident pure consciousness is the contradictor of our normal cognition of plurality, because, it means, again admission of duality of the contradicted and the contradictor.

Even on the religious ground, the doctrine of non-dual Brahman cannot be accepted, because it means denial of distinctions between good and bad deeds, pain and pleasure, this world and the world hereafter, knowledge and ignorance, bondage and liberation. Thus, if this doctrine is accepted then the consequence is destruction of the moral fabric of human life.

If it is said that, Brahman is the only Reality and on account of māyā or avidyā, this apparent world exists, then again it is impossible to prove, either the existence on māyā or mithyātva (illusory nature) of the world by any means of valid knowledge. The fundamental objection against Advaitin’s is, whether the doctrine of māyā (cosmic illusion) adopted to explain this multiplicity of the phenomenal world is real or unreal. If it is real, then it destroys the non-dual nature of Brahman and leads to an inevitable dualism. If it is unreal, then, this world which is caused by māyā will not be possible. To say that māyā is unreal and still it creates this world is as absurd as to say that a woman is barren and that she is a mother. And the Vedāntins themselves accept the theory that the real thing (the world) cannot be produced from unreal thing. Again, the very statement that māyā is indescribable, i.e. neither existent nor non-existent on account of being existent in the state of mundane life and no more at the state of realisation,
indicates that it is describable in terms of either existent on the pheno-
menal level or non-existent in the state of liberation.\textsuperscript{49} To say that \textit{māyā} is indescribable is self-contradictory like saying that 'I am dumb throughout the life and my father is bachelor.'\textsuperscript{50}

If we grant that \textit{māyā} exists, then where does it exist? Neither Brahman nor \textit{jīva} can be locus of \textit{māyā}. It cannot exist in the supreme Brahman which is pure-consciousness by nature. If it exists in Brahman then Brahman cannot be called pure-consciousness on account of being associated with \textit{māyā}. Even individual self is pure consciousness by nature and in essence, not different from Brahman and thus free from all taint of \textit{māyā}. If \textit{māyā} is an independent reality like Brahman and co-eval with it from the beginningless time, then it will be an impossible task to annihilate it by any means of liberation and the consequence of this indestructibility of \textit{māya} is an eternal bondage of the Soul.\textsuperscript{51} It is argued that \textit{māyā} exists (\textit{bhāvarūpa}) but it cannot be eternal like Brahman nor can it be an independent-entity. Though it is not capable of being determined by logic, still the denial of its existence would be contradiction of a felt fact and without adopting this doctrine of \textit{māyā} it is not possible to solve the problem of relation between the Absolute and phenomena, individual self and the Brahman, and Real and the unreal.\textsuperscript{52} Here, again, one may argue why should such kind of illogical and irrational concept be accepted at all? Instead of postulating this kind of unreal principle as the cause of the world, it is better to accept the view that the world is both different as well as non-different from the Brahman. The relation between the Absolute and the world is to be identity-cum-difference. An advantage of accepting this view is that there is no necessity of denying any one of the felt facts, the world and its cause the Absolute.\textsuperscript{53}

Again, the unreality of the world cannot be proved. Argument of the Vedantins is that, real is real always, remains constant at all the times and is free from origin and destruction, increase and decrease. But things of the world are subject to constant change, decay and death. Thus they are unreal. This Vedantic position can be put in the following syllogistic form: ‘World is unreal, because it is an apparent reality,
that which is apparent is unreal, (as for instance) silver in a shell, therefore, this world is unreal, because of its apparent nature.”

This word “unreality” of the Vedantins can be understood in three alternative ways: absolute non-existence, mistake for one thing appearing as another and indescribable. The first two meanings are denied by the Vedantins because, the former view leads to asatkhyāti, which is accepted by some Buddhists and latter view is viparītakhyāti, which involves two reals: the thing which is mistaken and the thing as it is mistaken. The third alternative that it means ‘indescribability’ is also not plausible because everything has corresponding expression for it in language, for instance, ‘this is a table’, ‘this is a Sarala tree’ etc. and what gives birth to an expression in language is either an object or a piece of knowledge. Again, an object must be either real or unreal, to deny both the alternatives to a thing is meaningless, only one of them can be denied. If indescribability of thing means ‘niḥsvabhāvattva’ (i.e. un-substantial) i.e. it is not what it appears to be then it leads to viparītakhyāti. If it is understood in the sense of un-knowability, then the very argument that a thing is un-substantial because it is un-knowable indicates that the thing is not absolutely un-knowable. And again, this apparent world cannot be talked about due to un-knowability and it cannot be made the subject of the syllogism such as the ‘world is unreal, because it is an apparent reality’, etc. If the world is un-knowable, then it could not be predicated of the world. Thus, un-knowability is inconsistent with the hetu i.e. pratīyamānatva. If un-knowability means that a thing is not really as it appears to us, then it cannot be said as un-knowable, because, here, a thing is known differently from what it is, which is again principle of viparītakhyāti un-acceptable to Vedantins. Even direct perception of plurality of thing of the world such as ‘table’, ‘chair’, ‘Sarala tree’ etc. disapproves the doctrine of indescribability of the world.

This doctrine of unreality of the world of Advaitins can be refuted by providing counter arguments such as “world is not false, because it is different from non-existing things, that which is different from non-existing thing is not false, as for instance, the Soul, this world is so, hence, it is not false.”

---

54 (a) S.M., p. 78.

55 (a) R.K., p.34-35.
(b) S.M., p. 78-79.

56 (a) R.K., p. 34-35.
(b) S.M., p. 80.
is irrational to accept the Vedantins view that the soul which appears as a reality in our apprehension is only real and other things are unreal which also appear as real in our apprehension. If it is said that inference proves the unreality of the world then, it can be argued that—Is syllogism, which is supposed to prove the unreality of the world, a part of the world or is it separate from it? If it is separate, then is it true or untrue? It cannot be true, otherwise the whole world will become true. It cannot be untrue, because, it proves nothing. If it is a part of the world then, it is unreal like the rest of the world and cannot accomplish its task of proving unreality of the world.\textsuperscript{57} If it is said that an argument has a practical validity and serves well as a working theory, then we have to accept that an argument is real, and it will destroy the fundamental position of the Advaitins, that nothing besides Brahman is real.\textsuperscript{58}

Even scriptural texts such as ‘sarvam khalu idam brahma’ etc. instead of proving unreality of the world prove reality of the world and Brahman i.e. all existing things of the world are Brahman.\textsuperscript{59}

Even Advaitic one-soul theory is not tenable because this view is again contradicted by perceptual experience of plurality of individual selves. Like Sankhyas,\textsuperscript{60} Jainas argue that, if ātman is only one then birth and death, bondage and liberation, pain and pleasure etc. should be one for the whole universe, if one person is blind or deaf, all should be blind or deaf, if one acts, all should act in the same way, if one suffers or enjoys, all should similarly suffer or enjoy. If selves were one, bondage of one should have meant bondage of all, liberation of one should have meant liberation of all. But what we find in the world is of a nature which is quite the opposite.\textsuperscript{61} If ātman is one then births of different kinds of beings such as hellish, human, divine, etc. are not possible. If ātman is one and all pervading, then why is not consciousness seen in innert things such as pot, stone etc.? Again, there will be no difference between liberated and bound Soul, preceptor and pupil, child and wise and so on.\textsuperscript{62} Jīva is different in each body

\textsuperscript{57} S.M., p. 80.
\textsuperscript{58} S.M., p. 80.
\textsuperscript{59} (a) A.S., p. 161.
\textsuperscript{(b)} S.M., p. 83.
\textsuperscript{60} Sankhyakarika, verse 18, pub. Chowkambha Sanskrit Series, 1963.
\textsuperscript{61} Syadvadaratnakara, V, p. 1094, pub. Motilal Ladhaaji, 27 Bhavanipeth, Pune, Vira Samvat 2457.
(pratikṣetram bhinnah) and thus, individuals are born and die at different times, their actions and experiences are diverse in nature and so on.

There cannot be absolute identity between jīva and Brahman because, in that case mundane world of different individual selves will be impossible to conceive on account of inseparability of jīva from ever liberated supreme Brahman. It also cannot be said that ātman seems to be different on account of bodily adjuncts but essentially one, because, in that case, just as after destruction of a pot its space is also freed, similarly, when body is destroyed every one will be liberated and no need of means of liberation, consequently no one will try to achieve this goal and whole science of liberation will become purposeless and theory of karma, rebirth, etc. collapse to the ground.

If it is said that, on account of samskāras (impressions) every jīva is not freed immediately after destruction of the body and becomes object of transmigration then the question is whether these samskāras of individual jīva are specio-temporal or all-pervading like ether. If they are limited by space and time, then the man died at particular place, to say at Citrakuta must born in the same place, because samskāras cannot travel from one place to another being inactive and unconscious (because of product of un-conscious avidyā). Samskāras cannot also be all-pervading because in that case, no place and no soul, even liberated, will be free from clutches of all-pervading samskāras and these samskāras might bring liberated man back to this mundane world. So, it is not possible to prove the oneness of souls and it is more wise and practical to accept the view of plurality of selves.

To sum up, Jainas point out that Advaitin’s arguments that reality is one without a second, on account of māyā this world appears as many (vivarta) and this apparent world disappears after destruction of māyā and realisation of Brahman, and trayaṇa, manana and nididhyāsana are the means of liberation, are meaningless like description of the barren woman’s son, because the existence of non-dual Brahman or ātman cannot be proved by any available means of knowledge.

---

44 P.N.T., VII, 56.  
44 S.M., p. 1095.  
46 S.M., p. 1095-6.  
46 S.S.P., p. 7.
Now, all these objections raised by Jainas are generally found in the writings of Ramanuja\(^{67}\) and Madhva.\(^{68}\) Possible answers are found in the works of stalwarts of Advaita Vedanta such as Sankara\(^{69}\) and his followers which certainly need separate treatment. It is also very important to note that, though Jainas criticise some of the doctrines of Advaita, still some Advaitic trends are crept into Jainism.\(^{70}\) And there was trend to reconcile Jainism with Advaita and other systems of Indian philosophy. For instance, Yasovijaya\(^{71}\) a 17th century Jaina stalwart proclaims that Jainism has no quarrel with any other system of Indian thought.


\(^{69}\) (a) Works of Sankaracarya.

(b) Sambandha Vartika.


(d) Madhvatrantramukhamardanam, ed. Pt. Ramanatha Diksit, Hanumanghat, Benares, 1941.

\(^{70}\) (a) samalam nirmalam cedamitidvaitam yada gatam advaitam nirmalam brahma tadaikavastaysate.


\(^{71}\) abaddham paramartha baddhanca vyavaharatvah bruvanobrahmavedanti nanekantam pratiksipet

—Adhyatmopanisat Prakarana, I-50, and 45-49 and 51.
Jaina Caves in Orissa: Its Architectural Significance

ANANDA CHANDRA SAHOO

Jainism entered into Orissa in its caujama form and continued to flourish throughout the ancient period, sometimes with royal support and in the status of the State religion, and at some other time in its low ebb. During its long course of history it received royal patronage of different ruling houses of ancient Orissa, a fact attested to by both literary and archaeological evidences. Here we propose to discuss the architectural significance of the rock-cut caves, that were dedicated to the followers of Jaina religion in ancient Orissa. In this connection it may be pointed out that besides the caves of the twin-hills (Udayagiri and Khandagiri) situated at a distance of 5 km. to the north-west of Bhubaneswar (the present-day capital of Orissa), no other architectural remains have so far been discovered, that can be attributed to the Jainas. Keeping this in view here our discussion is centered on the caves at Udayagiri and Khandagiri.

The above mentioned hills are honeycombed with caves both large and small locally termed as gumphā, of which 44 are in Udayagiri, 19 are in Khandagiri and 3 are in Nilagiri, which is situated very near to the twin-hills. Amongst these caves, many have been seriously mutilated and destroyed also, so that at present there are 33 caves altogether (18 in Udayagiri and 15 in Khandagiri).

Most of these caves were excavated during the 1st century B.C. is attested to by the famous Hatigumpha inscription of king Kharavela of the Mahameghvahana dynasty of ancient Kalinga. The line of

1 Fergusson is in the favour of describing the cave as gurbha or garbha—Illustration of the Rock-cut temples of India, p.2, footnote-1.
3 There is a good deal of controversy regarding the date of Kharavela. However, the late half of the 1st century B.C. has been the generally accepted theory. Cf. Indian Historical Quarterly, vol. V, p. 597; Roychoudhury, H.C., Political History of Ancient India, pp. 335-336; Majumdar, R.C., (ed), The Age of Imperial Unity, pp. 215-216; Chattopadhyaya, S., Early History of North India, pp. 56-59.
4 terasame ca vase supavata vijayavache kumari pavate arahate pakhina sansitehi kayanisidiyaya...
the said inscription states that in his 13th regnal year Kharavela excavated dwelling cells for the Arhats (Jaina saints) on the Kumari Parvata (Udayagiri). Kharavela was not the sole donor of the caves. Line 15 of the Mancapuri cave inscription of the Chief Queen of Kharavela states that to please the Arhats of Kalinga, the Chief Queen Lalaka, daughter of the king Hathisiha,6 excavated the cave. The short inscription7 of the Mancapuri cave further says that some chambers of the cave were excavated by Vakradeva,8 the successor of Kharavela; and prince Vadukha.9 Besides the royal donors, some caves have also been donated by the town-judge Bhuti and other officials and personal attendants of the royal house. Apart from the caves, there is a square ground containing a few rows of small pillars of poor-workmanship found on the summit of the Khandagiri. The presence of pillars has been interpreted by scholars, which seems quite probable, as the memorials of some Jaina saints who died while residing in that part of the ancient Kalinga country.10

The purpose of the excavation of caves was evidently for providing shelter to the Jaina recluses. Simultaneously it is also clear that there must have been some rock-cut activities in these hills for which Kharavela decided to engrave his inscription and donate caves. Thus, though it is difficult to know about the identity of the previous donors mainly due to the non-availability of inscriptive evidences, it can safely be said that the rock-cut activities in these hills started before the time of Kharavela. Stylistical analysis again prove that some of these caves were excavated quite later the period of Kharavela.

Out of the whole excavations, some caves consist of single cells only, such as Baghagumpha, Sarpagumpha, Vekagumpha, Chota Hatigumpha etc., while some others are of several cells having a pillared portico in front. In the examples without regular verandas, the top of the cell projects forward to form a cover. In some cases, notably the Baghagumpha, the cover to the cell carved into the figure

6 arahatam pasadayā kalingam samananaṃ lenam karitam rajino laukaca.
6 Epigraphia Indica (henceforward EI), vol. XIII, p. 159. 'Hastisimha'—Banerjee, R.D., History of Orissa, vol. I, p. 83. Other scholars, however believe that the Queen is said to be the daughter of King Lalaka, see Archaeological Survey of India (Annual Report), 1902-03, p. 40.
7 airasa maharajasa kalingadhipatino mahameghavahanasa vakadepac-sirino lena.
of an animal, a tiger. It has rightly been observed by Fergusson\textsuperscript{11} that
the Baghagumpha (Tiger cave) was not copied from any other conceivable form of rock-cut architecture. Further in some examples there
is remains of courtyard in front. The arrangement of courtyard is
singularly significant since it was left uncovered unlike the contemporary rock-cut architectural monument in western India. This practice
of leaving the courtyard uncovered was mainly due to the rough-texture
of the stone in these hills. The rest group of caves are double-storeyed
containing several chambers, with a pillared veranda and open courtyard in front. To this group belong the Mancaipuri cave and
Ranigumpha, both are on the Udayagiri; by far the largest and most
elaborate in the entire group. Besides these varieties, there are also
some upper storey caves in the form of Jayavijaya and Alakapuri. This
kind of caves clearly suggest that the excavation was used to be carried
on from the top to the bottom.

In the ground plan outlay this group of caves stands singularly apart,
in as much as it was not planned at all and excavated irregularly and
also at different heights. The artist seemed to have used the natural
caverns and cleaves for the purpose. This was perhaps due to the
nature of the stone here, the substance of which is coarse sand-stone
of a varied texture, mostly soft, porous and incohering.

All the caves in these hills have been designed as the dwelling houses
(vihāras) meant for the Jaina monks. The sloping rise of the floor at
the rear end was serving the purpose of pillow. Besides, the height
of most of the caves are considerably low, and in some cases only a
little more than the height of a man. The doors of the caves are also
of very small dimensions. In the case of many cell caves, the cells are
separated by a stone partition wall of about three inches in thickness.

The caves having verandas, display a bench of stone measuring
about one foot to one foot and six inches, which runs round the three
sides of the veranda. This arrangement seems to have been underta-
taken for the purpose of seating and resting. Small and big niches are
found to have been carved on the top of the veranda wall for the purpose
of keeping personal articles of the monks. This arrangement is a
departure from the general practice of carving niches on the interior walls.

The interior of the cells is austerity plain, whereas, in important
examples, the facade of the caves alongwith the brackets supporting

\textsuperscript{11} The Cave Temples of India, reprint, 1969, p. 68.
the ceilings of the *verandas* are beautifully decorated with relief sculptures. Besides the decorated facade, in the case of multi-cell caves, the interval portions between the doors are also decorated with relief sculptures. These relief sculptures are again divided into various independent panels to express the different meaning of different panels.

Unlike the rock-cut architecture of western India, the interior of these caves is adequately lighted. This is effected both by the direct opening of caves into the *veranda* and by the profusion of door-openings; and also along with side windows in some examples.

Like the contemporary and preceding rock-cut architecture of other parts of India, here the artist also copied some of the technique and patterns of the existing structural houses, in the live rock. On this score some prominent features should be noted. In most of the examples the doorway jambs slightly incline inwards demonstrating a comparatively wide base of the doorway than the top, which in turn counter the outward thrust. Further, in some examples the ceilings are convex like. Besides all this, the pillars in the *veranda* are surmounted with architraves and brackets, which in turn support the roof of the *veranda*, which is lower in height than that of the roof of the cell. However, on the other hand, these caves also demonstrate a different line of development simultaneously. Unlike the western examples, which are directly copied from structural *vihāras*, the central hall of which was surrounded with cells on its three sides, is completely absent in the example of Udayagiri and Khandagiri. The cells here are directly open either to the outer air or into the *veranda*.

One of the most interesting features of this group of caves is noticed in the arrangement of the upper storey in case of the double-storeyed caves. Both in the case of the Ranigumpha and the Mancapuri cave the upper storey does not rest immediately on and above the lower one, but recedes a few feet back into the rock. This arrangement seems to have been adopted mainly to follow the configuration of the slope of the rock, and also to lessen the load on the ground floor which in turn suggest the poor quality of the rock. Thus it is hold that the artists here were forced to follow this method which was demanded by the nature of the rock. In such arrangements the open space left in front of the first floor was used as balcony, which was also provided with flight of steps.

The absence of caitya shrine at Udayagiri and Khandagiri is one of the remarkable features. This is in clear contrast to the contemporary western Indian Buddhist rock-cut architecture where it was indispensable for a complete monastic establishment. For the absence of caitya hall Fergusson argues that perhaps in this part of India the followers of Jainism used the wooden halls as caitya shrines. It is difficult to support the above contention and to explain why they did not copy that in the rock, while some of the prominent features of these caves are copies of structures already in vogue made up of perishable materials. Elsewhere, Burgess holds that “the nature of their religion did not require large assembly halls like the caityas of the Buddhists.” This statement bears some credence when we mark the comparatively very small viharas donated for the Jaina monks at Udayagiri and Khandagiri.

In summing up, this group of caves seems to adopt an independent course of development, with very little in common with the contemporary rock-cut activities of western India. It has been observed that certain fundamental forms, both architectural and decorative, exhibit the same trend that was introduced by Asoka in the examples of Barabar Hill caves. At the same time it must be noted that though the artist had taken the inspiration from the earlier examples, they have retained their own identity in moulding their exercise with a number of new innovations traced only at Udayagiri and Khandagiri group of caves.

---

13 Ibid., pp. 92-93.
15 Brown, Percy., Indian Architecture, p. 35.
Units of Length in Jaina Cannons

N. L. JAIN

Introduction

The Jaina cannons contain large amount of descriptions about the physical phenomena in the world besides the main spiritual processes and discussions. Their knowledge is sensory in the first instance which is analysed by mind to give proper form and explanations. Barring super-sensory knowledge, all other forms are primarily relative and qualitative. Their accuracy and absolutism is possible only through measurements. These give reliability and credibility to the descriptions. The Jaina scholars know this fact and that is why they have written general and special treatises in this direction. The accuracy of the descriptions contained in them depends upon the standard units used.

There have been three main areas of measurements since the earliest times: mass or volume, length, distance or area and time. In contrast, the International Congress on Weights and Measures, 1971 have accepted seven areas under this category—mass, distance, time, electric current, heat, light and matter. It could be surmised that the last four categories could not develop in olden times. The author has pointed out earlier about the varieties in names, stages and values of time units described in Jaina cannons of various ages. This does not make it possible to evaluate and compare the accurate meanings for the descriptions based on them. It was, therefore, suggested that there must be uniformity of names, stages and equivalent values in current units for the canonical time measures. Likewise, length units also require evaluative consideration.

It is found that there is no such variety in length units described in cannons as time. Still, there is no uniformity in their names and values used. The current paper is meant to emphasise the importance of uniformity in length units and to activate the scholars to move in this direction.

Concept of Measurement in Jaina Cannons

Jaina cannons have coined the term of māna or pramāṇa for the process of measurement. Though Anyogadvārasūtra (ADS), Bhagavati (B), Trilokaprajñāpti (TP), Jambūdviṇaprajñāpti (JDP) and other cannons do not mention classification of measures, but Rājavṛtika (RV) and Trilokasāra (TS) have accepted two varieties of measures—laṅkika or worldly and lokottara or para-worldly. The first category is mainly related with weight, volume, cost or number of materials and has six sub-classes. These are virtually measures of mass (dravya-māna) only. Though ADS and RV seem to include the length measures through the variety of avamāṇa, but TS has described it as a measure of volume. This seems to be more reasonable in view of the descriptions.

The para-worldly variety includes the measure of length and time. It has actually four sub-classes—dravya (matter), length in all respects (kṣetra), kāla (time) and bhāva (quality). The matter-measure gives us the weight and volume of materials from the smallest atom to the largest earth. The length-measure gives us the distance, area and volume of one space unit to the last of the world space. Time units measure from one samaya unit of time to infinite time units and quality-measures knowledge, perception, view-points and numbers. All these four para-worldly measures of Akalanka are covered by the four general measure types of ADS. In contrast, the Saṭkhaṇḍāgama (SK) has five general types of measure seperating view-point type from bhāva of ADS. The para-worldly nature of these measures seems to be the creation of Akalanka of 7th. century who has many credits of this type. In addition, the ADS has classified the units of time, matter and length in two varieties—space-point based and division based. The first one has atom as the basis while the other has five varieties of units to which Akalanka has added tat-pramāṇa as the sixth variety under worldly matter units. The division-based basic units of time and length are samaya and angula respectively. In contrast, Akalanka has these two varieties of units for length alone. The authors of B, TP and JDP do not propound any para-worldly measures like Akalanka.

10 Acarya Yatisrṣabha, Tilayapannatti-1, JSS Sangha, Sholapur, 1956, p. 13
12 Bhatta Akalanka, Tatvartha Vartika-1, Bharatiya Jnanapith, Delhi, 1944, p. 2058.
14 Ibid.
15 Acarya Puspadanta and Bhutabali, Saṭkhaṇḍāgama-1. Amraoti, 1939, p. 80.
The *ADS* has three main classes of *bhāva* (quality) measure with many sub-classes thereupon. The *Bhagvati* does not have these types.

**Table 1  ADS Classification of Measures**

<table>
<thead>
<tr>
<th>Measure, 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>of Mass, 2</td>
</tr>
<tr>
<td>of Length, 2</td>
</tr>
<tr>
<td>of Time of Quality</td>
</tr>
</tbody>
</table>

- **Space-point based**
  - **Division based,** 5
  - **Atom**

- **Māna, 2 Unmāna Avamāna Pratimāna Gacīta**

- **Vol. of solids, Vol. of liquids**

  - **Space-point based**
    - **Division based**
      - **Atom**
      - **7 classes with Angula**
        - **3 types**
          - **Space-point based**
          - **Division based**

          - **Existence of Atoms**
            - **Samaya, Avali etc.**

          - **Qualities Viewpoints Number**
            - **7 types**
            - **Jiva, 3 Ajiva, 5**
              - **3 types**

              - **Knowledge, 4 Perception, 4 Conduct, 5**
              - **Colour, 5 Taste, 3 Smell, 2 Touch, 8 Shapes, 5**
Akalanka has mentioned only upayoga\(^1\) (perception and knowledge) as a variety of bhāva but he has given only five types of knowledge (and no perception or its varieties) in explanatory commentary. Table 1 and 2 summarise the ADS and RV measures. It seems that ADS classification is more practical than RV which has repetition, incompleteness and confusion. Table 3 summarises the useful informations about the different measures. This also makes it clear that no dividing line could be drawn between worldly and para-worldly measures as the latter includes all the six varieties of the first type. Of course, it seems that the latter type has more extensive area of measures to cover length, time and qualities. If we define this measure as that which has measuring limits beyond the fineness and grossness of worldly measures which may be invisible or unholdable, still, the numerable measures

<table>
<thead>
<tr>
<th>Table 2 Akalanka Classification of Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measures</td>
</tr>
<tr>
<td>Worldly,6</td>
</tr>
<tr>
<td>Para-worldly,4</td>
</tr>
<tr>
<td>As in ADS 5</td>
</tr>
<tr>
<td>Taipramāṇa, 1</td>
</tr>
<tr>
<td>Mass, 2</td>
</tr>
<tr>
<td>Length</td>
</tr>
<tr>
<td>Time</td>
</tr>
<tr>
<td>Quality</td>
</tr>
<tr>
<td>Number, 3</td>
</tr>
<tr>
<td>Simile, 8</td>
</tr>
<tr>
<td>Space-point based</td>
</tr>
<tr>
<td>Division based</td>
</tr>
<tr>
<td>Angula etc. 3 types</td>
</tr>
<tr>
<td>Samaya, Avali etc.</td>
</tr>
<tr>
<td>Upayoga, 2</td>
</tr>
<tr>
<td>Knowledge</td>
</tr>
<tr>
<td>Perception</td>
</tr>
<tr>
<td>Paiya, Sāgara, SA, Pra, GA, J, L, PL</td>
</tr>
</tbody>
</table>

\(^1\) See fn. 7, p. 206.
of matter, the varieties of *angula* (*A*) etc. of length and *muhūrta*, day, fortnight etc. units of time can never be called para-worldly. In addition, Akalanka has divided the matter-measure in two varieties: number-measure and simile-measure (*upama-mana*). The latter

### Table 3 Useful Informations About Different Measures

**A. Worldly Measures (RV) or Dravyamāna (ADS)**

<table>
<thead>
<tr>
<th>Measure Type</th>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard or basic</td>
<td>Pratimāna</td>
<td>Mustard seeds, flowers of myrtle etc.</td>
</tr>
<tr>
<td>Volume measure</td>
<td>Māna</td>
<td>Measure of volume of solid and liquid; <em>kudav</em>, <em>droni</em>, <em>sodasika</em> etc.</td>
</tr>
<tr>
<td>Weight measure</td>
<td>Unmāna</td>
<td>Measure of weights by balances</td>
</tr>
<tr>
<td>Measure of mass/area</td>
<td>Avamāna</td>
<td>(i) Measure of water in hand-cup etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(ii) Measure of land by <em>dhanus</em> etc.</td>
</tr>
<tr>
<td>Measure of numbers</td>
<td>Gavana Māna</td>
<td>Counting of materials</td>
</tr>
<tr>
<td>Measure of cost</td>
<td>Tatpramāna</td>
<td>Measure of cost by height (of horse) or halo of jewels etc.</td>
</tr>
</tbody>
</table>

**B. Para-worldly Measure (RV) or Measures (ADS)**

<table>
<thead>
<tr>
<th>Measure Type</th>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure of mass/volume</td>
<td></td>
<td>Measure of mass/volume from an atom to the largest earth</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td></td>
</tr>
<tr>
<td></td>
<td>measure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Simile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Measure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Space-point</td>
<td>Measure from a space-point to the whole world</td>
</tr>
<tr>
<td></td>
<td>Division</td>
<td></td>
</tr>
<tr>
<td></td>
<td>based</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Measure from 1 <em>samaya</em> to infinite <em>samayas</em></td>
</tr>
<tr>
<td></td>
<td>Qualities</td>
<td>Measure of qualities of knowledge, perception, conduct and viewpoints, and numbers</td>
</tr>
<tr>
<td></td>
<td>View-points</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td></td>
</tr>
</tbody>
</table>
has eight varities.\textsuperscript{12} Out of which, \textit{palya} and \textit{s\=agara} are definitely time units and the rest six are length units. The simile-measure, therefore, should not be taken as sub-class of matter-measure of para-worldly type. Of course, it would be a different case if one assumes them to be matter units because they are closely related to matter. This will mean a regress point. In view of these discrepant facts, the Akalanka classification of measures seems to be superfluous and not important. A serious consideration is necessary on this point.

\textit{Basis of Measure of Length in Jaina Cannons: Space-point or Prade\=sa}

Jainas have independant reality of space like time. It accomodates all the realities in the Universe and it is the basis for their movements. It was included in the five \textit{astik\(\dot{a}\)yas} (reality with space-points) from the very beginning and hence its position is somewhat different from the time reality. The space has infiniteness, extension and omnipresence. It has no varieties of practical and real type like time. Nevertheless, it is assumed for practical purposes that the space occupied by atom is known as \textit{prade\=sa} or unit space-point. The extension of space is denoted in the form of these space-points. The infiniteness of space is due to its infinite number of space-points. These are the basis for lengths or distance units. These are also the base for quantitative descriptions of the cannons. These are termed as \textit{ak\=as\=anu}\textsuperscript{13} or space atoms like matter atoms. These are the measure of minimum length and thus form its basic units. As the space has extension, it could be 2- or 3- dimensional also. Hence the basic unit of \textit{prade\=sa} also forms the basis for area and volume units.

It has been seen that time and distances are independant of each other still the length units are described in cannons as correlated with time units. The larger units of time, \textit{palya} and \textit{s\=agara}, have been defined on the basis of \textit{yojana}, length unit. Though \textit{B}, \textit{TP}, \textit{RV}, and \textit{JDP} follow this tradition, the \textit{ADS} and \textit{SK} deal length units independantly.

\textit{Measure of Length in Bhagavat\=i and Other Jaina Cannons}

The Jaina cannons like \textit{B}, \textit{ADS}, \textit{SK}, \textit{TP}, \textit{RV}, \textit{TS}, \textit{JDP} and others written between 100 BC to 12th. century AD contain descriptions about

\textsuperscript{12} Ibid., p. 207.
\textsuperscript{13} Acarya Kundakunda, \textit{Pancastikayasara}, Bharatiya Jnanapith, Delhi, 1975, p. xxi.
length measures. Muni Mahendrakumar ‘Dvitiya’\textsuperscript{14} and Lishk et al\textsuperscript{15} have discussed them as described in A\textit{DS}. Accordingly, these have three varieties—(i) self measure, (ii) utsedha measure and (iii) pramāṇa measure. These are utilised in measuring lengths of different types and extensions shown in Table 4. All the above cannons have these three types of measures. A critical and comparative study of these measures will

Table 4 Uses of Different Length Measures

<table>
<thead>
<tr>
<th>Name</th>
<th>Unit</th>
<th>Equivalence</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Utsedha</td>
<td>Utsedhangula, (UA)</td>
<td>—</td>
<td>Measurements of heights of bodies and idols</td>
</tr>
<tr>
<td>2. Self or Ātma</td>
<td>Ātmāngula, (AA)</td>
<td>2 UA</td>
<td>Measurement of utility and useful small things</td>
</tr>
<tr>
<td>3. Pramāṇa</td>
<td>Pramāṇāngula, (PA)</td>
<td>500/1000 UA</td>
<td>Measurement of islands, oceans, cities, solar system etc.</td>
</tr>
</tbody>
</table>

be presented here which are summarised in Table 5 resulting in the following facts :

(i) All scholars have accepted the seven measure units from angula to yojana as the practical units.

(ii) All agree upon angula as the practical unit of length. The category of this unit determines the value of yojana. The basic angula has been taken as utsedha angula.

(iii) The standard unit of ātma angula is the finger tip of a standard healthy person with a height of 84 ātma angula. The human heights of 120,108 or 96 angulas depend upon the different conditions and hence not taken as standard.

(iv) One ātma angula unit is canonically equal to 2 utsedha angulas.\textsuperscript{16}

(v) The *angula* unit is 1-dimensional as per *JDP* which is also known as *sūcyangula*.¹⁷

(vi) One *utshedha yojana* has 7,68,000 *angulas*. Taking this as the last unit, and assuming it as equal to 4 *kośas* or 8 miles (1 mile = 1.66 kms. = 1,66,000 cms.), 1 *utshedha angula* comes out to be equal to 13,28,000/7,68,000 = 1.73 cms. Datta and Singh¹⁸ have shown that 1 *anguliparva* of Buddhist measure is equivalent to 1.32" or 3.68 cms. The *utshedha angula* of the Jainas has half this value, i.e. it is equal to 1.68 cms. It is on this basis that 1 *Utsedha yojana* has been calculated to be equal to 8 miles or 13.28 kms. Thus, by interpolation of *yojana* or extrapolation of *angula*, the *utshedha angula* has a value of 1.68-1.73 or 1.70 cms. on the average.

In contrast, G. R. Jain¹⁹ has assumed a *hasta* = 24 *utshedha angulas* = 45.90 cms. and hence 1 *utshedha angula* = 0.75" = 1.90 cms. This means a *utshedha yojana* = 15.09 kms. or 100/11 miles instead of 13.28 kms. as above. He has used this value to calculate the velocity of light based on its Vedic value of 4404 *yojanas* per *nimeṣa* (0.25 sec.) which is sufficiently close to the current value.²⁰ It must, however, be said that there is no confirmed base for this value of *angula*, though L. C. Jain²¹ also agrees with this value. The acceptance of different values for the same basic unit creates doubt on the reliability of calculations based on them.

Muni Sri Candan has also discussed the equivalence of *utshedha angula* on the basis of the height of Lord Mahavira as 7 *hastas*. He maintains that the canonical height is based on *utshedha angula* which is equal to 3.5 *hastas* in self measure. This is equal to 84 *ātma angulas* as 1 *hasta* = 24 *ātma angulas* and 1 *utshedha angula* = 0.5 *ātma angula*. Hence 7 *utshedha angulas* × 24/2 = 84 *ātma angulas*. If one assumes the *utshedha angula* as 1.70-1.90 cms., the Lord’s height comes to be a minimum of 7 × 24 × 1.70 = 285.6 cms. or 9.25 feet. This value seems to be inconsistent on all accounts for a man born in tropical Bihar area. Thus, he has questioned both the above *utshedha angula* values. He does also not agree with the *paramāṇu* or atom as the basic unit of length due to the difficulties in its standardisation. Instead, he has supported the Jaina concept of *angula* standard on the basis of being natural. He

---

¹⁷ See f.n. 6, p. 237.
¹⁸ See f.n. 14, p. 236 f.n. 1.
### Table 5 Units of Length in Some Jaina Cannons

<table>
<thead>
<tr>
<th>Basic Unit</th>
<th>Paramana (P)</th>
<th>Trilokaprajnapati (TP)</th>
<th>Rajavartika (RV)</th>
<th>Jambudvipaprajnapati (JDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\infty P$</td>
<td>1 Utalaksimalakhanika (U) $\propto P$ = 1 Usasannasanna (U) $\propto P$ = 1 Utsangyasangya (U) $\propto P$ = 1 Avasannasanna (U)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 $U$</td>
<td>1 Slaksnalakhanika (S) = 1 Sannasanna (S) = 1 Sangyasangya (S) = 1 Sannasanna (S)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 $S$</td>
<td>1 Urdharenu (Trutirenu) (Tr) = 1 Trutirenu (Tr) = 1 Tr = 1 Tr (Practical Atom)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 $Tr$</td>
<td>1 Trasarenu (Ts) = 1 Ts = 1 Ts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 $Ts$</td>
<td>1 Ratharenu (Rr) = 1 Rr = 1 Rr</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 $Rr$</td>
<td>1 Hairhead (UBHH) = 1 Hairhead (UBHH) = 1 Hairhead (UBHH) = 1 UBHH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Devakuru-Uttarakuru)</td>
<td>(Uttama Bhogabhumi)</td>
<td>(As in B)</td>
<td>(As in TP)</td>
</tr>
<tr>
<td>8 $UBHH$</td>
<td>1 Hairhead (MBHH) = 1 Hairhead (MBHH) = 1 MBHH = 1 MBHH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Hari-Ramyak Area)</td>
<td>(Madhyama Bhogabhumi)</td>
<td>(As in B)</td>
<td>(As in TP)</td>
<td></td>
</tr>
<tr>
<td>8 $MBHH$</td>
<td>1 Hairhead (JBHH) = 1 JBHH = 1 JBHH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Hemvat-Airavat Area)</td>
<td>(Jaghanya Bhogabhumi)</td>
<td>(As in B)</td>
<td>(As in TP)</td>
<td></td>
</tr>
<tr>
<td>8 $JBHH$</td>
<td>1 Hairhead (PVHH) = 1 PVHH = 1 PVHH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Purva-Videha)</td>
<td>(Karnabhumi)</td>
<td>(Bharata-Airavat-Videha)</td>
<td>(As in TP)</td>
<td></td>
</tr>
<tr>
<td>8 $PVHH$</td>
<td>1 Liksa (Li) = 1 Li = 1 Li</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 $Li$</td>
<td>1 Yuka (Yu) = 1 Yu = 1 Yu</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 $Yu$</td>
<td>1 Yavamadhya (Y) = 1 Yava (Y) = 1 Yava (Y)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 $Y$</td>
<td>1 Angula (A) = 1 A = 1 A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000 $A$</td>
<td>1 Pramanangula (PA) = 500A = 1 PA</td>
<td>500 A = 1 PA</td>
<td>500A = 1 PA</td>
<td></td>
</tr>
</tbody>
</table>
Table 5  Units of Length in Some Jain Canons (Contd.)

<table>
<thead>
<tr>
<th>Basic Unit</th>
<th>Paramanu (P)</th>
<th>Trilokaprajñapti (TP)</th>
<th>Rajavartika (RV)</th>
<th>Jambudvipaprajñapti (JDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 (A) = 1 Pada (P)</td>
<td>= 1 (P)</td>
<td>= 1 (P)</td>
<td>= 1 (P)</td>
<td>= 1 (P)</td>
</tr>
<tr>
<td>2 (P) = 12 (A) = 1 Viṣṭi (V)</td>
<td>= 1 (V)</td>
<td>= 1 (V)</td>
<td>= 1 (V)</td>
<td>= 1 (V)</td>
</tr>
<tr>
<td>2 (V) = 24 (A) = 1 Hasta (H)</td>
<td>= 1 (H)</td>
<td>= 1 (H)</td>
<td>= 1 (H)</td>
<td>= 1 (H)</td>
</tr>
<tr>
<td>2 (H) = 48 (A) = 1 Kuksi (K)</td>
<td>= 1 (K) (Rikkv)</td>
<td>= 1 (Kisku) (K)</td>
<td>= 1 (K)</td>
<td>= 1 (K)</td>
</tr>
<tr>
<td>2 (K) = 96 (A) = 1 Dhanus (D)</td>
<td>= 1 (D) (Dhanus, Danda)</td>
<td>= 1 (D)</td>
<td>= 1 (D)</td>
<td>= 1 (D)</td>
</tr>
<tr>
<td>2000 (D) = 1,92,000 (A) = 1 Kosa (Ko)</td>
<td>= 1 (Ko)</td>
<td>= 1 (Ko)</td>
<td>= 1 (Ko)</td>
<td>= 1 (Ko)</td>
</tr>
<tr>
<td>4 (Ko) = 7,68,000 (A) = 1 Yojana (Y)</td>
<td>= 1 (Y)</td>
<td>= 1 (Y)</td>
<td>= 1 (Y)</td>
<td>= 1 (Y)</td>
</tr>
</tbody>
</table>

C. Larger Units

| 1000 \(A\) = 1 PA | 500 \(A\) = 1 PA | 500 \(A\) = 1 PA | 500 \(A\) = 1 PA |
| 1000 \(Y\) = 1 PY | 500 \(Y\) = 1 PY | 500 \(Y\) = 1 PY | 500 \(Y\) = 1 PY |

1. Jagasreni (J) = 1/7 Rajju (R)  
   As in B

1. Rajju (R) = 1/7 Jagasreni (J)  
   As in B
has given a value of 0.42" or 1.07 cm. to *utsedha angula* on the basis of many comparative references and logistics. Based on this, 1 *utsedha yojana* = 5 miles or 8.30 kms. and the height of the Lord as 5.84 feet or 178 cms. which seems to be reasonable. He has given critical descriptions about the various body heights in literature and has canonically defined the standard *utsedha angula*. However, his concept of natural *angula* being standard could not be justified on account of its larger variability than an atom.

Lishk, et el have given a fourth value for *utsedha yojana* as 0.085 km. (0.051 miles) equivalent to a value of app. 0.001 cm. for the *utsedha angula*. They have suggested that the values of these units should be decided on the basis of historical period and place. Thus, they seem to be adding to our difficulty in the process of standardisation and he has conveyed that the value of standard basic *angula* is variable, that is, it is a secondary standard rather than primary as desired by cannons. One would like to wonder how a variable quantity may be treated as standard. Moreover, the authors of *ADS, B, TP, JDP* and *SK* belong to the same side of the country and there should not be any variation in their descriptions. On the other hand, Akalanka and others originate from south and there should not be variations in their measures. But we see variations not only in both the groups, but in the same group also. One has to look as to the when and how of this variation.

**Length Units Smaller Than Angula**

The length units based on *utsedha angula* are known as *utsedha* measures representing their division based category. The smallest unit of the category is atom. As this is very fine, there is another practical unit known as ‘practical atom’. When we interpolate the *utsedha angula* unit towards smaller units, we reach the point of practical atom. Though the *JDP* mentions *truitirenu* (or *urdharemnu* of *ADS*) as practical atom, the *ADS* points it to be a much smaller unit \(8^{-2+\infty}\). The real practical unit is an infinite multiple of this unit which has the same name in *ADS* and *B*, but Table 5 shows that its name is different in *TP, RV* and *JDP*. The same is the position of the second unit eight times larger. These two units should have uniform names in current times. The cause of the different names should also be looked into.

It is seen that there are 13 stages of smaller units upto *utsedha angula* in *ADS* while there are 12 stages in other treatises including *Bhagavati*. The how and when of this change requires further consideration. Is it the mistake of the copyist?
Besides the above two differences, $B$ (100 BC) and $RV$ (650 AD) have same names of other ten units up to angula. In contrast, there is similarity in names in $TP$ and $JDP$ (names of hair heads and $yava$ or $yavamadhya$). This difference should also be looked into and formalised for the current age.

It is clear from Table 5 that each of the 12 stages from angula backwards is eighth part of the preceding unit. The first unit, thus, has a value of $1.6 \times 10^{-10}$ angula. If we multiply this value by its cm. equivalent of 1.70, the first unit has a value of $2.72 \times 10^{-10}$ cm. If one takes $JDP$ as a little more practical, and the practical atom or $truti\text{re}nu$ is taken as $8 \times 8 = 64$ times the first unit, the practical atom has a dimension of $1.75 \times 10^{-10}$ cm. which is the size of the current scientific atom. This suggests that $JDP$ concept of practical atom unit has the same atomic dimension as the current one. In contrast, the unit of length smaller than atomic one is that of atomic nucleus of $10^{-13}$ cm. This does not coincide with the canonical smallest unit $10^{-10}$ cm. It is, therefore, reasonable to suggest that $truti\text{re}nu$ or practical atom unit should be recognised as standard unit with a value of $10^{-8}$ cm. and the canonical descriptions should be made consistent on this basis.

The units smaller than this may be simile based, the unit of $1/\infty x_{as}$ seems to be imaginary as it does not have a measurable value. This inference does not seem to be consistent with definitions of $trasare\text{re}nu$ and $rathi\text{re}nu$ of $ADS$, but this seems better for accuracy. The $ADS$ definitions of these terms seems to be akin to the Vaisesikas who have $truti\text{re}nu$ as their standard length unit equal in size to the colloidal dirt particles seen floating in light path. This unit is almost about $10^5$ times larger than the Jaina smallest unit. The discrepancy between the values of $ADS$ unit and other reference units has to be explained. The common names of some of the units in Jaina and Vaisesika systems further suggests about looking into the original source of these units.

Besides concurring with size of atom, the 1.70 cm. value of utsedha angula has another result to its credit. If one takes $yojana=8$ miles and $pram\text{\=a}na \text{yojana}=500$ $yojanas=4000$ miles, the velocity of light based on Vedic data comes to be $1,40,930$ miles/sec ($2.34 \times 10^{18}$ cm./sec). The value of 1.90 cm. for utsedha angula gives this value as $1,87,300$ miles ($3.10 \times 10^{10}$ cm.) per second. These values are reasonably approaching the current values. This is quite encouraging. But when we move for distances in solar system, we find that we have the distance 14 times

---

larger for moon and 30 times lesser for sun. This discrepancy is awaiting explanation. The other values of utsedha angula will increase the discrepancy still further.

It has already been pointed out that the normal angula is 1-d and it is also named as sūcyangula. There seems to be some difference in the RV and JDP descriptions of this unit. But JDP seems to be more reasonable. This angula has three varieties as shown in Table 4. It is seen that there is difference between the values of pramāṇa angula in Digambara and Svetambara systems. No comments have been made on this point by modern scholars who have mostly mentioned this difference. For equivalence, the two pramāṇa angula must be equal. One could suggest that this difference has accrued due to the two forms of angula units—ātma and utsedha, the one ātma angula being double of the other utsedha angula. It could be surmised that the Digambara pramāṇa angula is based on utsedha angula scale while the other pramāṇa angula is based on ātma angula scale. If both are taken on the same scale, the difference will vanish. From the example of the Lord’s body height, it is the utsedha angula scale coined by canonicals. Thus, the Svetambara value converted to utsedha angula scale will give us the Digambara value of pramāṇa angula. Some calculations on this basis are given in Table 6. If onetakes the Svetambara value of pramāṇa angula, the results will be highly dis-discrepant.

The treatment of current equivalence of utsedha angula by many scholars presents a situation which was prevalent in the scientific world some 150 years ago when lack of standardisation produced confusion and checked growth of science. The same is the case with the atom when scholars of orient are pitching on the indivisibility which has been shattered. N. L. Jain has pointed out some problems in this regard and suggested the description to be taken in historical perspective. However, there seems a tendency in some scholars to trace canonical origin for all the newly developed facts and to either overlook or keep mum over the scientific evalutions of a large number of discrepant canonical descriptions about the physical phenomena. Sometimes varied explanations are given for the same fact to make it scientifically consistent despite the fact that opposite or inconsistent results accrue from this trend. Some of the results of calculations based on current opinions regarding equivalent values of utsedha angula are shown in Table 6 which will substantiate the above statement. The calculations

---

83 See f.n. 7, p. 208.
based on values of Lishk et al are most discordant. Table 6 will confuse one to decide the truth or accuracy of the fact. It is worth

Table 6. Some Calculations Based on Various Values of UA

<table>
<thead>
<tr>
<th></th>
<th>M. Mahendra</th>
<th>G. Jain</th>
<th>M. Candan</th>
<th>Lishk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values of $UA$, cm.</td>
<td>1.70</td>
<td>1.90</td>
<td>1.07</td>
<td>0.001</td>
</tr>
<tr>
<td>$UY$ (a) km.</td>
<td>13.28</td>
<td>15.09</td>
<td>8.30</td>
<td>0.085</td>
</tr>
<tr>
<td>(b) miles</td>
<td>8.00</td>
<td>100/11</td>
<td>5.00</td>
<td>0.051</td>
</tr>
<tr>
<td>$PY$ (500 $UA$), km.</td>
<td>6640</td>
<td>7545</td>
<td>4150</td>
<td>42.33</td>
</tr>
<tr>
<td>miles</td>
<td>4000</td>
<td>4545</td>
<td>2500</td>
<td>25.55</td>
</tr>
<tr>
<td>$PY$ (1000 $UA$), km.</td>
<td>13280</td>
<td>15090</td>
<td>8300</td>
<td>84.66</td>
</tr>
<tr>
<td>miles</td>
<td>8000</td>
<td>9090</td>
<td>5000</td>
<td>51.00</td>
</tr>
<tr>
<td>Size of Atom, cm.</td>
<td>$1.75 \times 10^{-8}$</td>
<td>$1.94 \times 10^{-8}$</td>
<td>$1.09 \times 10^{-8}$</td>
<td>$1.00 \times 10^{-10}$</td>
</tr>
<tr>
<td>Lord's body height, cm.</td>
<td>285.6</td>
<td>319.2</td>
<td>178</td>
<td>0.168</td>
</tr>
<tr>
<td>Velocity of Light, $UY$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) cm./sec.</td>
<td>$2.34 \times 10^{10}$</td>
<td>$3.10 \times 10^{10}$</td>
<td>$1.46 \times 10^{10}$</td>
<td>$1.49 \times 10^{8}$</td>
</tr>
<tr>
<td>(b) miles/sec.</td>
<td>$1,40,930$</td>
<td>$1,87,300$</td>
<td>$8,80,80$</td>
<td>$898.5$</td>
</tr>
<tr>
<td>Distance of moon, $PY$ (880 $PY$), lac miles</td>
<td>35.20</td>
<td>39.95</td>
<td>22.00</td>
<td>0.398</td>
</tr>
<tr>
<td>Distance of Sun, $PY$ (800 $PY$), lac miles</td>
<td>32.00</td>
<td>36.36</td>
<td>20.00</td>
<td>0.204</td>
</tr>
</tbody>
</table>

$UY$—utsedha yojana, $PY$—pramāṇa yojana

consideration which of these values may be taken as applicable in all cases. Lord Mahavira must have given one value for it. How and when this variety and values of angula started is a problem for further research. One of the reasons for this might be the personal or literary communication gap between the scholars of different periods. This gap has vanished in this century and it is the best time for uniformity in units and their values.

When areas or volumes are to be expressed, the 2-d or 3-d units are used. The 2-d and 3-d angula units are known as prataranga and Ghanāngula respectively. Their values are equal to the square and cube of the angula unit. They are shown in Table 7.

Larger Units of Length

The utsedha angula based yojana $Y$ is the unit of length of practical and average value. It seems quite small for larger distances. Jaina Acaryas have, therefore, coined some larger length units like time. These are known as pramāṇa units. The pramāṇa angula based yojana, $PY$
Table 7. *Current Values of Length Units in Jaina Cannons*

<table>
<thead>
<tr>
<th>Unit</th>
<th>Current Values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1-d Units</strong></td>
<td></td>
</tr>
<tr>
<td>1. <em>Ubasannananna</em> or the first</td>
<td>$10^{-10}$ cm.</td>
</tr>
<tr>
<td>smallest unit</td>
<td></td>
</tr>
<tr>
<td>2. <em>Truitirenu</em> or practical atom</td>
<td>$10^{-8}$ cm.</td>
</tr>
<tr>
<td>3. <em>SA</em> or <em>UA</em> cm.</td>
<td>0.001, 1.07, 1.70, 1.90</td>
</tr>
<tr>
<td>4. <em>AA</em></td>
<td>2 <em>UA</em></td>
</tr>
<tr>
<td>5. <em>PA</em></td>
<td>500 <em>UA</em>, 1000 <em>UA</em></td>
</tr>
<tr>
<td>6. <em>Yojana (Y)</em></td>
<td></td>
</tr>
<tr>
<td>(a) <em>UY</em>, km.</td>
<td>0.085, 8.30, 13.28, 15.09</td>
</tr>
<tr>
<td>(b) <em>PY</em>, km. (<em>500 UY</em>)</td>
<td>42.83 41.50 66.40 75.45</td>
</tr>
<tr>
<td>(1000 <em>UY</em>)</td>
<td>84.66 83.00 132.80 150.90</td>
</tr>
<tr>
<td>7. <em>Rajju (R)</em>, km.</td>
<td>Innumerable <em>Yojana</em></td>
</tr>
<tr>
<td>8. <em>Jagaśreṇī (J)</em> km.</td>
<td>$7R = 2.6 \times 10^{18} = 1.68 \times 10^{22}$</td>
</tr>
<tr>
<td><strong>2-d Units</strong></td>
<td></td>
</tr>
<tr>
<td>1. <em>Pratarangula (Pra)</em></td>
<td>(<em>UA</em>)²</td>
</tr>
<tr>
<td>2. *Jagapratara/Pratarloka (JP/PL)</td>
<td>(<em>J</em>)²</td>
</tr>
<tr>
<td><strong>3-d Units</strong></td>
<td></td>
</tr>
<tr>
<td>1. <em>Ghanāngula, (GA)</em></td>
<td>($UA$)³ = <em>UA</em> × <em>Pra</em></td>
</tr>
<tr>
<td>2. <em>Ghanaloka (GL)</em></td>
<td>($J$)³ = ($7R$)² = 343 <em>GR</em></td>
</tr>
<tr>
<td>3. <em>Khānduka (K)</em></td>
<td>1/64 <em>GR</em></td>
</tr>
</tbody>
</table>

is a 1-d unit in this direction. It has a value of 500 or 1000 times larger than *utsedha yojana* or it is equivalent to 4000 or 8000 miles (*1 yojana*=8 miles). Other different values based on various values of *utsedha yojana* are given in Table 6 varying between 6640-15090 km. These are measurable units.

With reference to the dimensions of the Universe, there is one more unit named as *rajju*. Canonically, it seems difficult to evaluate the current value for it, as its calculations involve innumerable number. Despite this, L.C. Jain and G.R. Jain have calculated the value of *rajju* unit to be between $10^{18}$-$10^{21}$ kms. *Jagaśreṇī* is still a larger unit which is equal to 7 *rajjus* or between $10^{19}$-$10^{22}$ kms. These larger units are just akin to the current units of light-year which has a value of app. $10^{12}$ km. This suggests that the larger units of length of the Jainas are sufficiently larger. These are also included in Table 7.
The above larger units have also their corresponding 2-d and 3-d units named as pratarloka and ghanaloka or loka respectively. These are equal to the square and cube of jagaśreṇi unit. Lokaprakāśa mentions another of 3-d unit of khandhaka equal to one-fourth cube (1/64) of a rajju. This and its derivative units are not found in Digambara tradition.

The above description of larger units shows the pramāṇa yojana to be different in different traditions. Thus, descriptions based on them will have a variance and their reliability will be more mythological. The current century, however, requires uniform value of pramāṇa yojana for proper evaluation of various descriptions in cannons.

Some Descriptions Based on Larger Length Units

Many descriptions relating larger distances, area and volumes are available in Jaina cannons. Some of them are presented here in current terms in Table 8. Let us first look at the island Jambudvipa in which we live. It is named after a Jambu tree in its centre. It is 6 yojanas in height, 8 yojanas in length and 6 yojanas in diameter. The corresponding description is given in Table 8. It is clear that this cannot be based on pramāṇa yojana. Basing it on utsedha yojana also looks like as exaggeration. Not only this, 108 Jambu trees of half the dimensions of the main tree are surrounding it. If we assume that there is at least one tree surrounding it in one direction, there will be a row of approximately 27 trees of 60 km. length covering a distance of $27 \times 60 = 1620$ km. in one direction. This is equal to a distance from Delhi to Karipeth, Bombay, Veraval and Howrah. Thus, it seems that more than half of the present India will contain only the family of Jambu trees. This description seems to be imaginary when one thinks of current distances and descriptions of the trees.

The Jambu island has a diameter of $10^5$ pramāṇas yojanas. This island has the Bharata Khand with an area of 1/190 of main island and a diameter of app. 526 pramāṇa yojanas. The island has Meru mount in the centre which is 99,000 pramāṇa yojanas overland and 1000 pramāṇa yojanas underland. The current values for these descriptions in Table 8 suggest that it is very difficult to determine the

---

25 See f.n. 7, p. 169.
26 Ibid., p. 170.
27 Ibid., p. 190
28 Suri, Srutasagara, Tattvarthavṛtti, Bharatiya Jnanapith, Delhi, 1944, p. 124.
category of reliability about them. Table 8 gives the values on the basis of utsedha yojana =15km. and pramāna yojana =500 utsedha yojanas. Calculations based on other values of utsedha yojana also yield similar discrepant values. These values can only be presently explained on the basis of faith in cannons and religion which do not

<table>
<thead>
<tr>
<th>Items</th>
<th>Values based on UY</th>
<th>PY based values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Jambūdvipa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Diameter, 10⁶ Y, km.</td>
<td>$1.5 \times 10^6$</td>
<td>$7.5 \times 10^8$</td>
</tr>
<tr>
<td>(ii) Circumference, $3.16 \times 10^6 Y$</td>
<td>$47.4 \times 10^5$</td>
<td>$2.4 \times 10^9$</td>
</tr>
<tr>
<td>(iii) Area</td>
<td>$11.6 \times 10^{11}$</td>
<td>$5.9 \times 10^{14}$</td>
</tr>
<tr>
<td>2. Bharata Khaṇḍa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Diameter, 526 Y</td>
<td>7890</td>
<td>$3.5 \times 10^6$</td>
</tr>
<tr>
<td>3. Mount Meru</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Under the Earth,1000 Y</td>
<td>—</td>
<td>$7.5 \times 10^6$</td>
</tr>
<tr>
<td>(ii) Over the Earth,99,000 Y</td>
<td>—</td>
<td>$7.4 \times 10^8$</td>
</tr>
<tr>
<td>4. Jambū Tree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Diameter, 6 Y, km.</td>
<td>90</td>
<td>45.000</td>
</tr>
<tr>
<td>(ii) Height, 6 Y</td>
<td>990</td>
<td>45.000</td>
</tr>
<tr>
<td>(iii) Length, 8 Y</td>
<td>120</td>
<td>60.000</td>
</tr>
<tr>
<td>5. Height (Lord Rsabhadeva), 0.06 Y 910 metres</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>6. Height of Palace, 225D (TP)</td>
<td>410</td>
<td>—</td>
</tr>
<tr>
<td>7. Length of Palace, 300D (TP)</td>
<td>547</td>
<td>—</td>
</tr>
<tr>
<td>8. Width of Palace, 150D</td>
<td>273</td>
<td>—</td>
</tr>
<tr>
<td>9. Height of Vijaya Dvara, 8 Y(JDP)</td>
<td>120 km.</td>
<td>—</td>
</tr>
<tr>
<td>10. Diameter Vijaya Dvara, 4 Y</td>
<td>60</td>
<td>—</td>
</tr>
</tbody>
</table>
require verification. This, however, is causing erosion in faith. Dr. Upadhye has\textsuperscript{29} exclaimed similarly in his editorial in TP adding that these descriptions are not appealing to the current scientific world. If we wish to convert the mythological category into reliability, one has to fix the cannonical length units with a definite current value uniformly. Most probably, this may not be possible. In that case, we must not insist on their permanent truth or omniscientist’s wordings. They must be taken in historical perspective as an attractive mythology so common in all the systems in olden periods of their development. A Pataliputra or Ballabhi type \textit{sang\texttt{i}ti} may also be a way out.

\textsuperscript{29} See f.n. 5, Preface-i.
Vaisnava Themes in Dilwara Jaina Temples

MARUTI NANDAN PRASAD TIWARI
KAMAL GIRI

Jainism has been one of the three principal religions of India. The interesting fact behind the widespread popularity of Jainism was its liberal and reciprocal attitude towards Brahminism, Buddhism and also the folk cults. During the pre-Christian and early centuries of Christian era it embraced the elements of yakṣa¹ and nāga² cults while at a later date it developed an amicable relations with other contemporary sects. This characteristic of Jainism is distinctly revealed in the borrowings of deities from other sects. The Vaisnavism had greatest share in such borrowings which is revealed by the assimilation of Rama, Kṛṣṇa and a number of other deities into the fold of Jaina pantheon.³ The two great epics of ancient India, the Rāmāyana and the Mahābhārata deal respectively with the caritas of Rama and Kṛṣṇa. It is quite fascinating to find these two great ancient characters being incorporated in Jaina creed during the early centuries of Christian era. This was indeed an attempt at the end of the Jaina Acaryas to respect the high reverence of the people towards Rama and Kṛṣṇa who also happen to be the principal incarnatory forms of Viṣṇu.

In Jaina pantheon Rama and Kṛṣṇa are included in the list of 63 talākāpurusas⁴ respectively as one of the nine Baladevas and Vasudevas. The early Jaina works like the Sīhānāṅgasūtra, the Samavāyāṅgasūtra,

¹ Mahavira during the course of his wanderings is always said to have stayed in the yaksayatanas and never in the Jina temples. The early Jaina works also make frequent references to the yaksas.
² The association of serpent-hoods with Suparsvanatha and Parsvanatha is suggestive of such elements.
³ An inscription of 1368 A.D., inscribed in a big temple known as Bhandaribasti in Sravanabelgola (Hassan, Karnataka), refers to the amicable relations between the Vaisanava and Jaina sects which was further encouraged by a Vijayanagar ruler Bukkaraya I. The inscription also speaks of very intimate and inseparable relations between the two sects. Epigraphia Karnatica, vol. 2, Inscription No. 344, pp. 26, 63, 146, 159.
⁴ The list comprises 24 Jinas, 12 Cakravartins, 9 Baladevas, 9 Vasudevas and 9 Prativasudevas.
the Kalpasūtra and the Paumacariya give detailed list of these talākāpuruṣas. It may be mentioned here that the 24 Jinas or the Tirthankaras, called devādhīdeva by Hemacandra, were held in highest veneration among both the sects of Jainas and all other deities, including 39 śalākāpuruṣas, occupy the position which is only next to the Jinas.

Of all the deities borrowed from other sects, Rama and Kṛṣṇa undoubtedly occupy the most exalted position in Jaina worship. They are said to have been the contemporaries respectively of Munisuvrata (20th Jina) and Neminatha (22nd Jina). The earliest Jaina work dealing with the story of Rama is the Paumacariya of Vimalasuri (473 A.D.). The Vasudevahīnā of Sanghadasa, (not later than 609 A.D.), the Padmapurāṇa of Ravisena (678 A.D.), the Uttarapurāṇa of Gunabhadra (9th century A.D.), the Mahāpurāṇa of Puspadanta (965 A.D.) and the Triṣaṭṭiśalākāpuruṣacarittra of Hemacandra (later half of the 12th century A.D.) also deal with the story of Rama at length. The Jaina story with few differences like the mention of Rama and Laksmana as having many wives and also the killing of Ravana by Laksmana etc. is almost similar to the story found in Valmiki's Rāmāyaṇa. Kṛṣṇa, however, enters somewhat earlier into the Jaina pantheon, evidenced by his reference even in the early Āgama works, namely, Uttarādhyāyasūtra, the Nāyādhammakahādo and the Antagaḍadasāo. The detailed references to Kṛṣṇa and his elder brother Balarāma are found in the Harivamśa Purāṇa (783 A.D.), the Mahāpurāṇa and the Triṣaṭṭiśalākāpuruṣacarittra.

The concrete manifestations distinctly suggest that Kṛṣṇa was accorded comparatively a favoured position than Rama. The instances of the renderings of Rama are found only on the Parsvanatha Jaina temple (c. 950-70 A.D.) at Khajuraho (Chhatarpur, M.P.), while Kṛṣṇa was represented at a number of Jaina sites. This was because of the latter's intimate relationship with the Jina Neminatha as his cousin brother. The northern facade of the Parsvanatha temple at Khajuraho contains an exquisitely carved image of Rama and Sita along with Hanumana. Another panel on the southern śikhara of this temple

pertains to a scene from the *Rāmakathā* wherein Sītā is sitting in *Aśoka-Vāṭikā* and Hanumana stands to her front, and imparting the message and ring of Rama to her.\(^7\)

The earliest instances of the rendering of Bālarama and Kṛṣṇa-Vasudeva with Neminatha, belong to the Kusana period. These figures are known from the Kankali Tīla, Mathura.\(^8\) A few later images of Neminatha, belonging to c. 10th-11th century A.D., also exhibit the figures of Bālarama and Kṛṣṇa in the *parikara*.\(^9\) During the early medieval period, narratives from the life of Kṛṣṇa were also carved, the instances of which are in the ceilings of the Jaina temples at Kum-bharia (Banaskantha, Gujarāt)\(^10\) and Dilwara\(^11\) (Vimala-vasahi and the Luna-vasahi, Mt. Abu, Sirohi, Rajasthan). An instance showing the episode of Yamalarjuna, is also carved on the southern facade of the Parsvanatha temple at Khajuraho.

The present paper endeavours to deal with Vaisnava themes represented in the Vimala-vasahi (1031 A.D.)\(^12\) and the Luna-vasahi (1230 A.D.),\(^13\) the most magnificent of all the existing temples in western India. Of all such temples showing Vaisnava themes, the Vimala-vasahi and the Luna-vasahi undoubtedly are the most important ones. They not only show the figures of Bālarama and Kṛṣṇa in the narratives pertaining to the life of Neminatha but also the independent renderings from *Krṣṇalilā* and some other significant Vaisnavite themes, such as the story of Bali and Yamana, *samudramanṭhana* and above all the figure of Narasimha, an incarnatory of Viṣṇu. Some of the representations in these temples, namely Kṛṣṇa playing ball on the bank of river Yamuna, the Narasimha incarnation of Viṣṇu, scene of *holi* and

---


\(^8\) The figures are in the State Museum, Lucknow (ACC. No. J. 47, J. 121) and the Archaeological Museum, Mathura (ACC. No. 2502).

\(^9\) Such figures are in the State Museum, Lucknow (ACC. No. J. 793, 66.53), the Archaeological Museum, Mathura (ACC. No. 37; 2738, B77) and the Temple No. 2 at Deogarh (Lalitpur, U.P.).

\(^10\) The Mahāvira temple (11th century A.D.) in its aisle ceiling, showing narratives from the life of Neminatha, contains the episode of Neminatha entering the *ayudha-sala* of Kṛṣṇa and demonstrating his physical superiority over Kṛṣṇa by blowing his powerful conch.

\(^11\) Also called Delvada, medieval Deulavada-grama.

\(^12\) Although the main image in the sanctum was consecrated in V.S. 1088 (c. 1031-32 A.D.), the *rangamandapa, bhramika* and the *devakulikas* were carved at a later date and may be assigned between c. 1145-89 A.D.

\(^13\) The consecration ceremony was held in V.S. 1287 (c. 1230-31 A.D.). The images and the *devakulikas* have inscriptions ranging in date between 1230 and 1240 A.D.
sumudramanthana along with the episode of Bali and Vamana are, however, not even mentioned in the Jaina works. These examples are distinctly suggestive of the Vaisnava influence at the site. It may be remarked that in the Trisastisalakapurusacaritra Krsna, also called Visnu, is endowed with kaustubha, saraṅga (bow), two quivers (aksaya-śara), nandaka (sword), kaumodakī (club) and a chariot with garudadhvaja.\textsuperscript{14}

The Vimala-vasahī, besides an instance showing Balarama and Krsna in a narrative from the life of Neminatha, also has the figures of Krsna subduing the Kaliya nāga and playing holt. The figure of Narasimha and episodes of samudramanthana and Bali-Vamana are also carved in the temple. The first ceiling of cell No. 10 shows narratives from the life of Neminatha. The central band has a water tank with the sporting figures of Krsna and Neminatha. (Fig 1) The presence of five queens of Krsna is probably suggested by the representation of five female figures in the scene. According to the Jaina works, there ruled a king Andhaka-Vrsni of Yadava family in the Sauripura city, who had ten princes, of whom the eldest was Samudravijaya and the youngest one was Vasudeva. In due course, Samudravijaya became the ruler of Sauripura. He had 16 sons including Aristanemi or Neminatha, who later become a Jina. Vasudeva had Rama (Balarama), Krsna (Vasudeva) and other sons. Krsna after killing Jarasandha became the lord of three continents and made Dvaraka his capital city. Aristanemi although strong and brave, because of his aversion towards worldly pleasures, had no desire to marry or become a ruler. Once while moving with his friends, Aristanemi entered the armoury (āyudhasāla) of Krsna and established his superiority in physical strength over him by lifting up with ease the Kaumodaki gadā (mace), trying the Saranga bow, turning round for a number of times the Sudarsana cakra and also blowing the Pancajanya śankha. Krsna was surprised to find Aristanemi playing with these mighty weapons and consequently decided to put to test the strength of Nemi out of fear. Nemi suggested that whoever was unable to bend the outstretched straight hand of the other should be declared defeated. Nemi easily emerged as victor in this trial of strength. On this Krsna became perturbed and thought that Nemi would one day easily take over the kingdom. But Balarama told Krsna that Aristanemi was not interested in worldly possessions and would renounce the world at an appropriate time. Jaina works also mention that in view of the aversion of Aristanemi towards worldly pleasures, Samudravijaya once asked Krsna to persuade Aristanemi to

\textsuperscript{14} Trisastisalakapurusacaritra, 5.5.160-69.
a marriage proposal and consequently Krsna took him to a water sport along with his wives.\textsuperscript{15}

The relief in the Vimala-vasahi shows in the second circular band the demonstration of strength of Nemi in the \textit{āyudhāśāla} of Krsna. In the scene, Krsna sits on a throne when Nemi enters. The hands of both are folded in greeting each other. Besides these figures there is another figure of Nemi lifting up the Kaumodaki \textit{gadā}. Further ahead there stands Nemi with outstretched straight right hand and Krsna is trying to bend it with his full strength but could not succeed even a little. Krsna is shown applying his full force with both his hands. One of his raised legs also suggests this point. On the other hand, Aristanemi is shown bending Krsna’s outstretched hand, in an easy manner only with his one hand. However, the hand of Krsna is shown in a bent position to suggest Nemi’s victory. Further ahead there stands Aristanemi successfully blowing the conch and trying the bow. The bow, however has been broken into two pieces. Next to this, there sit two figures probably of Krsna and Balarama, facing and talking to each other. Possibly the scene represents the worries of Krsna over the strength of Aristanemi who is getting assurance from Balarama about the future renunciation of Aristanemi.\textsuperscript{16}

The next scene, in the first ceiling of the cell No. 33 (originally cell No. 29), is a beautiful representation of the subjugation of Kaliya \textit{nāga} by Krsna. (Fig. 2) The Jaina works do not make any reference as to the game of ball played by Krsna and his friends on the bank of river Yamuna. This is mentioned only in the \textit{Mahābhārata} and other Brahminical works. These works mention that when ball fell into the river, Krsna jumped into Yamuna to fetch the ball and on being hindered by Kaliya he subdued the snake. The Jaina works instead mention that Balarama and Krsna were on their way to Mathura for taking part in the wrestling competitions at the invitation of Kamsa. While crossing the Yamuna, they encountered Kaliya \textit{nāga} who like friend of Kamsa intended to bite Krsna. The Jaina works further mention that after jumping on the back of snake Krsna immediately entered his hand into the open mouth of Kaliya and dragged him out of the river with the help of the lotus stalk tied to the snake like a nose ring. The snake, looking lifeless, was at last freed by Krsna at the request of its seven queens.\textsuperscript{17}

\textsuperscript{15} \textit{Trisastisalakapurusacaritra}, Neminatha Caritra, parva VIII, sarga IX.
\textsuperscript{17} \textit{Trisastisalakapurusacaritra}, Neminatha Caritra, parva VIII, sarga V.
The relief in the centre exhibits, in a circle, the Kaliya nāga with human bust. The tail of Kaliya shows long interwoven coils forming a circle in a beautiful manner with three hooded canopy. On the canopy there stands Kṛṣṇa in an active but easy mood subduing the nāga with a thin rope, looking like a lotus stalk, tied to its nose. Kṛṣṇa wearing karaṇḍamukuta, channavirā, necklaces and kaustubha, holds a ring, probably meant for disc, in his raised right hand in a manner as if to give a hit on the snake hoods. However, his left hand is engaged in subduing the snake. The nāga with folded hands is shown humbly accepting his defeat. On two flanks of the snake are carved three small figures of his queens with folded hands and looking towards Kṛṣṇa, as if requesting for the life of Kaliya. Two more nāginī figures with identical details are shown on each sides of Kṛṣṇa. Thus the sculptor here, in consonance with the Jaina text, has represented seven queens of Kaliya. The lower panel shows a reclining figure on a coach with two standing female figures, one pressing the leg of the reclining figure and the other one fanning him. The figure may be either Kṛṣṇa or Kaliya with queens. Further ahead, there stands a female figure, in between a pair of trees, watching the duel of two male figures, probably the wrestling between Kṛṣṇa and Cānūra. The upper panel shows Kṛṣṇa along with Bālārama and others playing a ball with sticks in hands. Some figures, playing on musical instruments are also shown. Thus the entire representation appears to have been carved on the basis of the Brahminic tradition.

The first ceiling of the cell No. 41 contains a beautiful representation of Kṛṣṇa playing holi with gopas and gopikās in gayful mood. (Fig. 3) The central figure, wearing a small kirīṭamukuta, long hanging uttariya (pitāmbara) and other usual ornaments, is holding two small objects, probably kaṇakaśrįṅgakoṣa (golden pickāris of cow horn shape) full of colour for sprinkling on the figures of gopas and gopikās, carved all round. However, we have reference to the sprinkling of coloured water in sport by kaṇakaśrįṅgakoṣa in the Kādambarī of Banabhatta. On two sides of Kṛṣṇa, there stand two gopas alongwith six female figures (gopikās), all likewise holding kaṇakaśrįṅgakoṣa. One of the female figures is also holding a pot, probably full of coloured water. The entire depiction is suggestive of the festive moods of Kṛṣṇa and others who are shown in different beautiful postures.18 However, it may be mentioned that the Jaina works do not refer to this episode of holi.

18 Even today in Mathura and Vrindavana, the people play holi with Srngī like object in hands.
The second ceiling of cell No. 49 exhibits a remarkable figure of 16-armed Narasimha, the man-lion incarnation of Visnu. (Fig. 4) The entire representation is so forceful and dynamic that it makes the figure undoubtedly one of the best figures of Narasimha in India. According to the Mahābhārata and other Brahminic works, there was a demon Hiranyakasipu by name who had obtained a boon from Brahma that he would not be killed by gods, demons, human beings or animals, nor would he die either inside or outside a structure, in day or night, on earth or in the sky and by any weapon or instrument. He had a pious son Prahlada who was devout worshipper of Visnu for which he was tortured by his father. Visnu ultimately rescued Prahlada and killed the demon respecting the boon granted by Brahma, by assuming the form of Narasimha and killed him with his sharp nails. The figure here represents the sthāvana form of Narasimha. Narasimha, in consonance with the injunctions of the Viṣṇudharmottara Purāṇa and other works, has been represented here in a dreadful appearance with the figure of Hiranyakasipu lying helplessly between his legs. The god is tightly holding the legs and hands of the demon with his four hands. The bearded figure of the demon, holding a shield and a sword, is shown as making an abortive attempt to attack Narasimha with the sword. The representation is very realistic and communicates the entire episode through the language of art. Narasimha with open mouth, protruding long tongue, big and open and long vyālas wears a small mukūta. His four hands with long nails are engaged in tearing off the belly of the demon while with four others he tightly grips the hands and legs of the demon. Of the remaining eight hands, two with open palms facing upwards are kept on the head while the other two show respectively the abhaya and tarjanimudrā, the former suggesting protection to Prahlada and the latter punishment to be inflicted on Hiranyakasipu. The other four hands hold a mace, a disc and a long rope (in two hands). Since Hiranyakasipu was a devotee of Siva, he is shown with small jata-jūta. The whole sculpture, carved in bold relief in the centre of the sixteen petalled full bloomed lotus, corresponding to the 16 hands of Narasimha, is a beautiful specimen of art noteworthy for its typical composition.

The ceiling, under discussion, assumes special importance since it has some more Vaisnavite themes carved all around the Narasimha

---

19 Narasimha killed the demon on the door step of the palace at the time of twilight, holding the demon tightly between his legs and tearing his belly with the sharp lion finger nails.

20 The nails of two hands are shown entered into the belly, while the other two hands are coming closer to the belly.
figure. On the north, the episode of samudramantana is carved in
detail. The scene opens with the churning of ocean by the gods and
demons with the help of a rope made of Vasuki nāga and the Mandarā-
cala mountain shown here as a tall pillar.21 Thereafter the fourteen
jewels coming out of the churning of ocean have been carved in a row.22
The first of all the jewels is Laksmi, shown as four-armed and seated
cross-legged, holding lotuses in two upper hands while her lower two
hands are kept in the lap in dhyāna-mudrā. Laksmi is followed by
ratnamālā, kal pávṛkṣa, a bull, a horse, and a hamsa (with lotus stems
in its beak). Further ahead are carved two bearded male figures, probably
Dhanvantari and Candrama, with a series of nine circles, suggesting
navanidhis. On south a few scenes from the life of Kṛśna have also
been carved. This includes Kṛśna sitting in the lap of his mother, a
couple, probably Vasudeva-Devaki, conferring with each other, Kṛśna
killing some demon in disguise by holding its leg, kand uka-krīḍā and
the subduing of Kaliya nāga. The reclining figures of nāga and nāgi
have also been carved in the present instance. On east, a figure, sitting
in a palanquin with its one arm being raised, is shown accompanied by
three attendants, holding sword and chatra. The figure may be
identified with Kṛśna moving towards Mathura to participate in the wrest-
ling competition. Further ahead are carved the story of Bali and Vamanā,
wherein the bearded figure of Bali is sitting on an āśama with its one
hand being raised in conversation with the attendant figures standing
on the front. Further ahead, there again appears Bali seated on a coach
with the standing figure of Vamanā, a vibhava of Viṣṇu. Behind Bali
there stands his guru Sukracārya pouring water from the kamandalu
in the palms of Bali for sankalpa. However, the open palm of Vamanā
is beautifully shown close to the hands of Bali as if accepting the san-
kalpa. Immediately after these figures, Viṣṇu is shown as Trivikrama
and putting his leg on the figure of Bali who is lying at his feet. This
is suggestive of the culminating point of the story according to which
Trivikrama in his two steps measured the earth and sky while in the
third Bali himself. Close to the figure of Trivikrama, there stands a
female figure who is none else but the wife of Bali. The entire episode
of Vamanā and Bali is here shown in a very impressive and wholesome
manner.

21 manthanam mandaram krtva tatha netram ca vasukim|deva mathitum aravdhah
samudram nidhimammasam—Mahābhārata,Adiparva 18.13.
22 The fourteen rānas as described in the Adiparva of Mahābhārata are Candrama,
Kaustubha manti, Paripata vṛksa, Surabhi cow, Laksmi, sura, Uccaisrava asva,
Dhanvantari (holding amṛta ghata), Mahanaga Airavata, Kalakuta mahaviṣa
etc. (Adiparva 18.34-44).
The ceiling under discussion is a non-pareil one since it depicts four different Vaisnavite themes in a single ceiling composed in a beautiful manner without any overlapping. The dynamism of central Narasimha figure is retained even by the smallest figures shown in the scenes of samudramanthana, Krsna-lilā, and Bali-Vamana episode.

Luna-vasahi also contains, in its ceilings and on the side of the beams on the south of rāngamandapa, the representations pertaining to the life of Krsna. The scenes include the birth and carrying of Krsna by Vasudeva to the house of Nanda and Yasoda, the childhood episodes (bālalilā) and the killing of demons by Krsna. On the left of the rāngamandapa, near the bhramikā, is carved in the ceiling, the nativity of Krsna. (Fig.5) It is well known that Krsna was born in a prison under the strict guard of Kamsa because Kamsa wanted to kill all the seven issues of Vasudeva-Devaki soon after their birth because of the fear that he would be killed by one of the issues of Devaki.23 The entire representation, divided into four squares, is very realistic. In the centre the figure of Devaki is carved reclining on a cot with her left hand kept under head. Close to Devaki the figure of newly born infant Krsna is lying. By her side there also appear four female figures, two of them fanning while the others holding vases. Below the cot are carved nine vases, symbolising navaanidhis, befitting the auspicious occasion of the birth of Krsna. The second square on its four sides (in the centre) shows the doors which are half closed with a figure standing in the intervening space in two cases. The doors are shut to suggest that Krsna was born in a house under strict vigil and guard of the soldiers of Kamsa. On the corners, there stand four pairs of elephants, facing each other with a tree carved in between. On the back of each elephant there sits a figure carrying a vase. The doors on the four sides in case of third square also are likewise half closed with a figure standing at each door. The two corners of the square are decorated with two trees, while the remaining two corners are occupied by the four-armed figures of Gajalaksmi and Cakresvari. Cakresvari, seated cross-legged, holds a conch, a disc, a disc and water-vessel. Below the seat of goddess is carved the figure of her mount Garuda in human form. The figure of Gajalaksmi, seated as cross-legged, bears theabhaya-mudrā, a long stalked lotus, a long stalked lotus and a water vessel. The seat of the

23 Trisastisalakapurusacaritra, 8.5.98-114. The Jaina works, however, do not mention that Krsna was born in prison; they simply mention that his birth took place in a house under strict guard of Kamsa and when Krsna was born the gods put to sleep Kamsa’s agents/watchmen so as to facilitate Vasudeva to carry baby Krsna to the house of Nanda in Gokula.
goddess is supported by two elephants, while at the top, on each side, as usual, there appears an elephant lustrating the goddess. Gajalakshmi is flanked by two bull-faced figures with folded hands who may be identified with Naigamesi, a god of child-birth in Jaina pantheon. Cakresvari, on the other hand, is joined by four female attendants holding vases and babies. Close to the bull-faced figures, there stand two other female figures holding ghāṭas. They are followed by the figures of musicians. The fourth outermost square again has half closed gateways and the figures standing in the intervening space. On east, the figures of three elephants and four horses alongwith two other elephants, facing each-other with their upraised trunks being interlocked, are shown. On south, however, 12 figures are carved, some with folded hands and some holding staffs. Two elephants and two horses, with the riders holding vases are carved on the west. Beside the figures on horses, there stands a figure holding a long parasol. At left extremity there stands a figure with a sword. The bearded royal figure sitting with a sword in its right hand is probably Kamsa instructing a figure, standing in its front with folded hands, for strict vigil as to the birth of Krsna. The figure is followed by a number of warriors holding swords. It may be noted here that the birth of Krsna no where else, even in the Brahminical temples, has been represented in such a detailed manner. The entire composition beautifully exhibits two different moods in the present renderings, one is of gaiety and celebrity on the birth of Krsna while other is of fear and strict vigil.

The side of the beam on east shows scenes from the childhood of Krsna in Gokula. (Fig.6) In the centre there sits a female figure, undoubtedly Yasoda, with two infants, Krsna and Balarama, sitting in her lap. There stand two female attendants with cāmaras on two sides of Yasoda. Close to these figures is carved baby Krsna standing in a cradle, the two ends of which are shown tied to the trees on two sides. The two figures sitting under the cradle may be identified with Nanda and Yasoda or with gopas. Further on left are carved Krsna killing an elephant, Padmottara by name. The elephant with its trunk near the feet of Krsna is shown as kneeling and thus suggesting as if being subdued by Krsna, whose right hand is kept on its neck while the left is raised to make a blow. Close to this, the scene of uprooting of the twin Arjuna tree by Krsna is carved. Krsna is here shown

---

24 However, the infant in left lap appears more to be a female baby with pronounced breasts; thus it may also be identified with the daughter of Yasoda Mahamaya or Chhimmanasa by name.
tightly holding the upper portion of the twin trees. The panel on right also shows a baby of course not Krsna, swinging from a branch of Kadamba tree. There are two male figures sitting under the tree along-with two other figures standing with sticks. These may be identified as cowherd boys. The stick held by a figure behind his head in poise is a very natural depiction of normal daily life in Gokula. Above these figures are shown five vases suggestive of milk pots. Thereafter stands a male figure (bigger in size) with his body tilted in a very natural manner towards the stick in his hand which almost takes the entire weight of his body. On its front are carved the figures of six cows. Thus the scene here undoubtedly represents Krsna as cowherd. Further ahead are shown two standing female figures churning the butter. Close to it, baby Krsna, in a beautiful manner, is making efforts to obtain the butter from the pot.

The side of the beam on west shows (from left) a bearded royal figure undoubtedly Kamsa, sitting on a high backed simhásana under a chatra. The figure holds some object, probably sword, in his right hand while the left is being raised as if giving instructions to the armed soldiers, standing and sitting in his front. Thus the present scene represents the court of Kamsa. Further ahead are carved two elephants and three horses, each accompanied by a male figure. Among these male figures, one is shown attacking on the trunk of the elephant with some pointed object while the other figure is holding the raised leg of another elephant. The scene undoubtedly pertains to Krsna and Balarama fighting the two elephants, Padmottara and Campaka, in the court of Kamsa. Further ahead is carved two storied palace with corridor. Some figures are sitting by the side of windows in the corridor. The stepped pyramidal roofs, open pavilion on the ground and two separate roofs respectively of the pavilion and the second storey are specially noteworthy from the viewpoint of palace architecture during those times. The figure standing in between the half open door is very impressive and have been highly praised by Stella Kramrisch. The entire scene thus represents the royal court and the palace of Kamsa in Mathura.

The second ceiling of cell No. 11 exhibiting the renunciation of Neminaththa in great details probably show the fighting between Krsna and Jarasandha in the second panel. The two figures standing on

---

25 Trissatisalakapurusacaritra, 8.5.116-30.
26 Trissatisalakapurusacaritra, 8.5.155-69.
chariots, facing each-other, in *tarasandhāna*, are identified as Krsna and Jarasandha.\(^{27}\) They are accompanied by the army of soldiers on foot and horse-backs and are holding sword, shield and spear.\(^{28}\)

**Illustrations:**

Fig. 1. Narratives from the Life of Neminatha (with *āyudhasālā* of Krsna and water sport of Nemi with Krsna and his queens), ceiling, cell No. 10, Vimala-vasahi, c. 1150 A.D.

Fig. 2. Krsna subduing Kaliya *nāga*, ceiling, cell No. 33, Vimala-vasahi, c. 1150 A.D.

Fig. 3. Krsna playing holi, ceiling, cell No. 41, Vimala-vasahi, c. 1150 A.D. (Courtesy : American Institute of Indian Studies, Varanasi).

Fig. 4. Narasimha (16 armed), ceiling, cell No. 49, Vimala-vasahi, c. 1150 A.D.

Fig. 5. Birth of Krsna, ceiling, close to *raṅgamāṇḍapa* (on south), Luna-vasahi, 1230-40 A.D.

Fig. 6. Scenes of Krsna-Īśā, side beam, close to *raṅgamāṇḍapa* (on south), Luna-vasahi, 1230-40 A.D.

\(^{27}\) *Trisastisalakapurusacaritra*, 8.7.134-457.

An Unpublished Medieval Image of Bhagavan Aranatha from Bhagalpur

AJOY KUMAR SINHA

Bhagavan Aranatha, the eighteenth Jaina Tirthankara, is not widely known to the students of the Jaina art. He was born at Hastinapura. His father, Sudarsana, was a ksatriya prince of the Lunar Dynasty (Candravamsi). His mother’s name was Mitrasena. Bhagavan Aranatha like some other Jaina Tirthankaras became a Cakravarti before becoming a Tirthankara. The sacred tree peculiar to him is Cuta or Mango. His complexion was of golden colour and he was of 20 dhanuşa in height. Kumbha and Rakhiya were his chief disciples. His attendants consisted of the Yaksas named Yaksendra and the Yaksini named Dharini Devi. His symbol i.e., lāṇchana was nandyāvarta (a kind of svastika) or a fish which come under the aṣṭamangalas or eight auspicious symbols. He attained nirvāna on the Mount Sammeya (Parsvanath Hill, Bihar) at the age of 84,000 years.

Historically the saga of Bhagavan Aranatha can be traced back as early as the Kusana period. The well known Mathura Image Inscription records the dedication of a Nandivarta (Nandyavarta) at the ‘Vodva’ stūpa. The stūpa was built by the gods (devāntirmite) due to the best

1 Bhattacharya, B. C., The Jaina Iconography (New Delhi-1984 reprint), pp. 53-54.
2 Uttarā Purana, p. 285.
3 Ibid.
4 Kalpasutra, p. 183.
efforts of Sravika Dina at the request of Monk Vṛddhahasti who belonged to the Koliya gaṇa and Vaira śākḥā. The Jaina literature⁶ such as Bṛhatkalpasthāya and Vyavahārabhāṣya of Sanghadasagani Kṣamārāmana (8th century A.D.) refer to a devamitrī stūpa at Mathura. The great Jaina saint Jinaḥadragani (6th century A.D.) visited this place.⁷ The date of this inscription was read as year 49 (circa 127 A.D.).⁸ This devamitrī stūpa was dedicated to Bhagavan Aranatha whose lāṅchana is a nandyāvarta. This most important Jaina inscription of Mathura proves the popularity of this Jina during the Kusana period.

Bhagavan Aranatha obtained the name Ara because Queen Mitrasena, his mother, saw a dream of a wheel (ara) of jewels⁹ while he was in the womb.

It is important to note that not a single sculpture of Bhagavan Aranatha have come to light from the province of Bihar which is treated as most sacred land in the Jaina pantheon. The author of this paper who is working on Jainism in the Eastern Bihar, however, traced a singular sculpture of Bhagavan Aranatha at Bhagalpur recently.¹⁰ The town of Bhagalpur (ancient Campa)¹¹ needs no introduction to the Jaina community. Here Bhagavan Vasupuja attainted the pancakalyānakas¹² and it was the place of ancient Jaina temple (Pūrabhadra caitya)¹³ of Bhagavan Parsvanatha. The image of Bhagavan Aranatha in question have been enshrined in the Digambara Jaina Temple,¹⁴ Bhagalpur. It is carved of white marble stone and measures 10 × 6 inches. It is inscribed which records its donation by one Govinda Raja, in the samvat 1533 (circa 1476 A.D.). The Jina is seated in padmāsana in yogimudrā. His curly hair in uṣṇīṣa style, long ears, half closed eyes, śrīvatsa mark upon chest testify his Jinahood. The lāṅchana depicted in the middle of the pedestal is a fish instead of a nandyāvarta.

From the aforesaid discussion, it is clear that the image of Bhagavan Aranatha enshrined in the Bhagalpur Temple is of great archaeological importance.

⁷ Vividhatirthakalpa, p. 19.
⁸ Epigraphia Indica, Vol. IV, pp. 244 t.
⁹ Uṭāra Purāṇa, p. 205.
¹² Samavayanga, p. 6.
¹³ Aupapatiṇa Sutra, p. 10ff.
Hewlett's Mixture
for
Indigestion

DADHA & COMPANY

and

C. J. HEWLETT & SON (India) PVT. LTD.

22 STRAND ROAD

CALCUTTA 1